Montana State Library
3 0864 1006 0972 9

MONTANA HISTORICAL SOCIETY

S
CLASS NO. 338.47623
W5
ACCESSION NO. 48547

Digitized by the Internet Archive
in 2012 with funding from
Montana State Library

http://www.archive.org/details/sixcountyareawid1972wils

338.47623
W5

3

REPORT NO. 3

RECOMMENDATIONS

SIX COUNTY

AREAWIDE IMPACT STUDY

MALMSTROM DEPLOYMENT AREA, MONTANA
COUNTIES OF CASCADE, CHOTEAU, LIBERTY, PONDERA, TETON, TOOLE

WILSEY & HAM

FOSTER CITY, CALIFORNIA

MONTANA HISTORICAL SOCIETY

S
CLASS NO. 338.47623
W5

ACCESSION NO.

Wilsey & Ham

PLANNING - ARCHITECTURE - ENGINEERING - SURVEYING

1035 EAST HILLSDALE BLVD., FOSTER CITY, CALIF. 94404
TELEPHONE 349-2151 CABLE: "WHINT"

EARL P. WILSEY
(1892-1957)
LEE E. HAM
WILLIAM B. WRIGHT
DONALD B. GUTOFF
NORMAN B. HANSEN
RONALD T. CALHOUN
HAROLD K. SCHONE
JACK H. DOVEY
HAROLD H. HEIDRICK
DANIEL W. KLAR
DENIS W. LE VASSEUR
SAMUEL M. NASH
FREDERICK J. PAUSCH
ROY W. FOWLER, JR.
ROBERT B. WRIGHT
KENNETH L. WUEST
CHARLES W. LOUGHRIDGE
CLYDE C. CABRINHA
SANJI YANO
R. DALE BELAND
LLOYD C. COFFELT
DAVID F. EVANS
FELIX M. WARBURG
R. JAMES FAIRMAN
RALPH E. VOICE

19 May 1972

Mr. Perry F. Roys, Executive Director
Department of Planning and Economic Development
State of Montana
Capitol Station
Helena, Montana 59601

Dear Mr. Roys:

Wilsey & Ham is pleased to submit the results of our study of the impact on six counties in north central Montana that will occur as a result of the ABM Safeguard System program. The enclosed report contains specific recommendations for the most beneficial absorption of the expected impact during the construction, installation and operations phases. It also includes implementation procedures to assure that the long-range effects of this program on the local communities will promote a permanent revitalization of the region and begin to build a new quality of life for the permanent residents of the area.

Because the population impact during all three phases of the ABM program is going to be very large in relation to the present population in the cities closest to the two sites, the consultants feel that the major improvements in public services can best be achieved by concentrating this new population. We feel that the magnitude of the impact warrants a conscious policy of concentration in the communities of Conrad and Shelby to take the utmost advantage of the potentials there for orderly growth. The timing of the three successive waves of human occupation in the construction, installation, and operation phases provides an opportunity for permanent housing on the outskirts of Conrad that could serve for the entire long-term duration of the ABM program. The short-term residential needs are so immediate and so immense that it is impossible for them all to be met in one place. Many construction workers and families will have to find a variety of temporary housing in Conrad, Shelby, Great Falls and, to a limited extent, in other, smaller communities.

But, for the longer-term, a concentration of new housing at Conrad would avoid the tremendous expense of building special purpose isolated enclaves at the military bases and, instead, offer a full range of normal community services and facilities to military and civilian personnel and their families.

The study has been a most difficult one to accomplish, since it deals with many unknown factors and many which are not under the control of the State or the local governmental agencies. Fortunately, both the Department of Defense, through the Corps of Engineers, and the construction contractor, Peter Kiewit, have been most cooperative in furnishing information about their plans and timing. The additional cooperation furnished by members of your department, especially Harold Price, Charles Bentley and Lloyd Meyer, has made the gathering and evaluation of local information much more successful. The day-to-day local availability of our two subcontractors, Morrison-Maierle of Helena and T.A.P. of Bozeman, has also facilitated the study process.

We have appreciated the opportunity to perform this unique study, and are hopeful that our recommendations as carried out will be of lasting benefit to the citizens of the State of Montana, and will start a process of rejuvenation and prosperity for the specific region under study. We look forward to the opportunity to be of continuing assistance to you and the State.

Yours very truly,

WILSEY & HAM

Felix M. Warburg
Principal in Charge

FMW/mw

REPORT 3 - RECOMMENDATIONS

SIX - COUNTY

A R E A W I D E I M P A C T S T U D Y

MALMSTROM DEPLOYMENT AREA, MONTANA

COUNTIES OF CASCADE, CHOUTEAU, LIBERTY, PONDERA, TETON, TOOLE

APRIL 1972

WILSEY & HAM, Consultants to
The Montana State Department of Planning & Economic Development
San Mateo, California

MORRISON-MAIERLE, INC. Contributing Engineering
Consultants
Helena, Montana

T.A.P., INC. Contributing Economic Consultants
Bozeman, Montana

Project No. Montana CPA-MT-08-0048

The preparation of this report was
financed in part through the Urban
Planning Grant from the Department
of Housing and Urban Development,
under the provisions of Section 701
of the Housing Act of 1954, as amended.

CONTENTS

	PAGE
INTRODUCTION	1
THE PROGRAM	4
THE CONCEPT	8
SUMMARY RECOMMENDATIONS	10
REGIONAL ASPECTS	16
LOCAL ASPECTS	21
IMPLEMENTATION	41
CAPITAL IMPROVEMENTS TARGETS AND STRATEGIC PLAN	50
APPENDICES	55

INTRODUCTION

INTRODUCTION

Right now the north central area of Montana is undergoing dramatic change that could well mark a turning point in its history. Whether these changes will be for better or for worse will depend on the extent local communities can intervene and guide development in their area.

The decision of the Department of Defense to develop two manned ABM Safeguard sites in the Malmstrom Deployment Area is already having effects. Anticipating a surge of population throughout the region and particularly in Conrad, the federal government has appropriated funds to assist in enlarging schools, sewer facilities, highways, hospitals, fire departments, and other municipal facilities in the area.

This is only the beginning of a long-term project which has attracted construction workers and their families since late 1971. Waves of new people will be coming into and leaving the area for the next five years. In the immediate future, summer season construction will attract new population influxes of more than 6700 in 1972 and 6000 in 1973. In late 1974, as the construction period ends, Western Electric personnel will arrive to install the hardware. When they leave at the end of 1976, they will be followed by the military and operations personnel who could remain for a long as 20 years. By that time the population will level off and stabilize at 3500 above present population levels. The ABM program thus will signal a new era for the entire region.

The $195 million project[1/] which began in 1970 increases and strengthens the North American antiballistic missile defense system. To augment existing Minuteman installations, the Department of Defense is constructing Safeguard facilities -- a Perimeter Acquisition Radar (PAR) in Toole County 34 miles northeast of Conrad, a Missile Site Radar (MSR) in Pondera County 12 miles southeast of Conrad, and three Remote Spring Launching Sites (RSL's). The impact from these additions will be felt primarily in both counties but particularly in the town of Conrad with noticeable effects also in the communities of Shelby and Chester. Four other counties - Cascade, Chouteau, Liberty, and Teton - will also receive some impact. These six counties comprise the planning area for the impact study.

What ABM means in fact is a sudden influx of people who will need houses, groceries, clothes, banking facilities, hardware supplies. People with cars that need gas, oil, tires, and repairs. People with children of all ages who go to school. People who want to play outdoors in parks and on lakes, who want to hunt and hike.

These new people will generate new money in the region. In the 1972 and 1973 construction years, new payrolls should bring $15 million to $18 million.

1/Dollar value of sites upon completion

INTRODUCTION continued

Later, beginning in 1976, higher per capita military pay could aggregate almost $20 million annually.1/ Although much of this income will be spent on base, there will still be additional state income tax and local property tax revenues produced from payroll money.

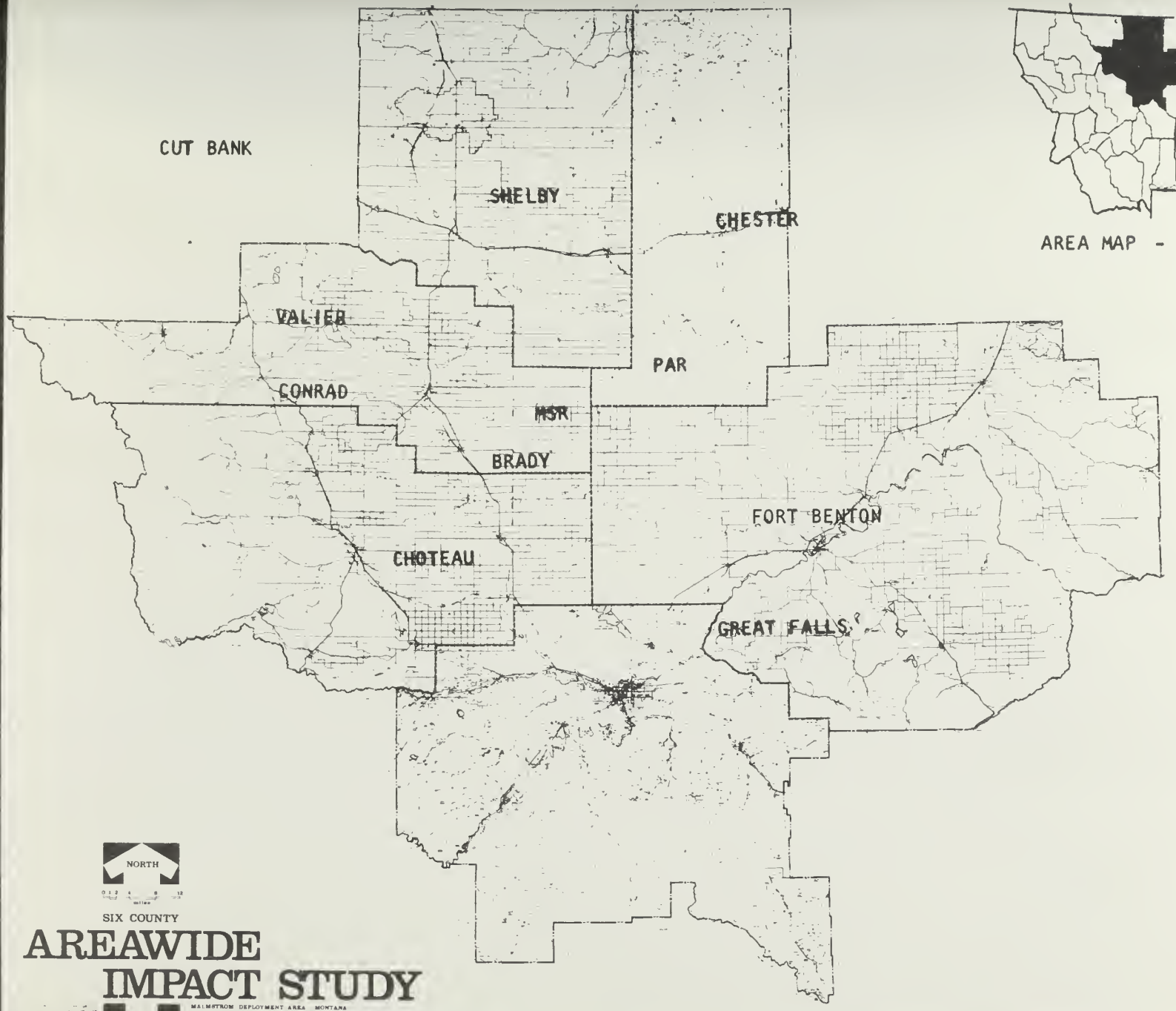
But the increased purchasing power and additional tax dollars will be offset by new public costs to expand schools, medical facilities, public utilities, and public protection services. Many of these costs, however, if carefully planned, can bring a new way of life to Conrad in particular and the region as a whole. With intelligent planning and foresight the improvements that will be made to accommodate the ABM influx can contribute to the quality of life in the entire area making it a place where people will want to live, work, and play.

ABM comes at an especially opportune time. Population has generally been declining in the area as people have been lured away by the glamor and employment opportunities of cities or forced to leave the area due to inadequate job opportunities. However, the north central Montana area offers wide open space often uninhabited for many miles. Temperatures tend to extremes dropping as low as -50° in the winter with hot, dry summers. It is a quiet, rural place with agriculture the principal mainstay.

New life could be injected into the area with ABM. This project may very well provide the necessary population to make large-scale public improvements feasible if the population is concentrated enough to do so. Such improvements can help reverse the recent loss of population and can attract and hold new people. ABM may, indeed, give the necessary impetus to the development of the region as a major recreation area in the State.

This report is a forecast of what will happen during the next four or five years as the ABM program continues if the recommendations are followed. It points out the problems that can occur and suggests ways of coping with these changes. It provides a framework for a development policy that can be initiated now which will take advantage of the stimulus provided by ABM to structure this growth into a sound, orderly pattern to create an environment where the quality of life will induce long-range stable population trends.

1/Current payrolls were increased at 5% annually from 1971 averages to estimate 1976 worker and military payrolls. In 1971 the average construction worker payroll was $9200. Beginning with the operations phase, the technical mix of military and nonmilitary personnel is expected to produce average payrolls of $10,000 in 1976. At that time it is estimated that there will be about 1075 military personnel as well as almost 126 secondary and 329 primary workers. Thus, the military payroll is estimated at $14.4 million. Added to an estimated worker payroll of $5.1 million, the expected total payroll associated with the ABM project is approximately $19.5 million.



AREA MAP - STATE OF MONTANA

SIX COUNTY

AREAWIDE IMPACT STUDY

MALMSTROM DEPLOYMENT AREA MONTANA

CASCADE · CHOUTEAU · LIBERTY
PONDERA · TETON · TOOLE COUNTIES

Wilsey & Ham

THE PROGRAM

THE PROGRAM

By August 1972 the ABM project will have attracted almost 6800 new people to the six-county area. After a seasonal decline the population will surge again in May 1973 beyond 6000. In the long-term this influx will stabilize around 3500 by the end of 1976. Significantly for planning purposes, this influx will come in waves, it will occur over a short time span, and it will happen in areas where the population would be expected to decline if it were not for the DOD project.

The program is a planning study to determine what short-term measures and long-range improvements will be required to meet the expected new levels and distributions of population in communities in the impact area. It is complicated by the uncertainty of the ABM program which could terminate at any time or continue, on the precedent set by other weapons systems, for as long as 20 years.

Other factors contribute to the complexity of the program. Changes caused by ABM are happening at the very time that planning for these changes is being done. People have been flowing into the area since late 1971. An additional wave will bring the ABM population to the highest peak of the entire program - almost 6800 - during the 1972 summer construction season. If Conrad had the capacity, at least half of the new population would probably choose to live there close to the construction sites. However, despite the efforts of the contractor to supply housing and the availability of transient facilities - hotels, motels, boarding houses, and rented rooms - Conrad is already overflowing. More mobile homes are being brought in but it is clear that many people who would prefer to live in Conrad are being forced - and will continue to be forced through the summer of 1972 - to find accommodations elsewhere. A great part of this spillover will probably be drawn to Great Falls which has enough housing to absorb the surplus population. The recent inauguration of a commuter bus service to both worksites originating in Great Falls, as well as the availability of the variety of services and facilities that a large city can offer, makes that city an attractive residential choice for workers and families. But it is also likely during the warm summer months that many workers will camp in trailers and trucks at or near Conrad or even closer to the construction sites, placing an even greater burden on already strained public services and facilities in the immediate impact area.

In effect, then, planning for the first and greatest ABM population peak which occurs in 1972 is being done virtually after the fact. The first part of the construction phase is already happening. We can only describe it in midstream, as new information is coming in daily. What we can plan, however, are the subsequent phases -- the 1973 peak population period, the installation phase which will begin in 1974, the military operations phase beginning in 1976 and the longer term regional future. Thus, the planning program is two-pronged ... one problem is to suggest ad hoc, palliative measures to accommodate the immediate population surge and to alleviate the inundation facing the communities now and this summer. The other effort is to make recommendations for the longer-range future growth and development of the communities and the region as a whole, based upon an increased but stable population.

PLACE	1970 Census	Impact Population 3rd Quarter 1972 [1]	Estimated Peak Population Total 3rd Quarter 1972 [2]	Impact Population 2nd Quarter 1973 [1]	Estimated Peak Population Total 2nd Quarter 1973 [2]	Estimated Total Population 1976 4th Quarter [2]
Conrad	2945[3]	1447	4565	1985	5156	5734
Shelby	3111	350	3468	538	3658	3970
Brady	225	75	294	75	292	285
Valier	651	150	794	150	792	732
Chester	936	75	962	75	949	885
Great Falls	60,091	4369	65,731	2824	64,574	63,590
Other 6-County Impact Area[4]		210	40,830	280	40,705	39,678
Other Outside 6-County Area[5]		90	90[6]	120	120[6]	80[6]
Total		6766	116,734	6047	116,246	114,954[6]

1/ The impact population includes workers and military personnel. It also includes support population which will come into the area attracted by business and employment opportunities resulting from ABM. It also includes the Interstate Highway I-15 workers who are in the area and who will be moving northward for the next few years. In addition, families of primary and secondary - wives and children - are included. For detailed assumptions and ratios of new workers coming into the area to total workers required, for ratios of married men and families to single men, refer to Appendix A.

2/ These columns reflect Impact population added to 1970 Census plus 1950 - 1970 natural average trend of the annual average growth over the periods 1950 - 1960 and 1960 - 1970. Natural average growth trends are detailed in Appendix A.

3/ Conrad 1970 Census population of 2945 used throughout this report is the total of 2770 within the corporate limits plus 175 from the unincorporated fringe area. Source - Department of Planning and Economic Development, State of Montana, Comprehensive Areawide Water and Sewer Plan, Volume 2 (1970), Table 3, page 53.

4/ Primarily the communities of Choteau, Dutton, Sunburst, Joplin, Oilmont and Kevin as well as smaller communities and rural areas.

5/ Glacier and Hill Counties primarily in Cut Bank and Browning.

6/ Estimated Total Population reflects entire population of the Six-County Impact Area plus impact population only from areas outside the Six-County region.

Another complicating factor is the necessity of preparing for differing groups with diversified needs who are rapidly coming into the area over a relatively short time. Between now - Spring 1972 - and 1976, there will be two waves of temporary population. The construction workers and the subsequent installation personnel will arrive in the area and will depart after varying periods of time. For some it will be a stay of two or three years. For others, it may be a considerably shorter time - one year or less.

Contrasted with the transiency of the construction and installation population in the first two phases of the project is the relative permanency of the military and civilian operations personnel. Their long-range presence is potentially the greatest impact problem, particularly their need for permanent suitable housing. Whereas traditional military policy calls for dependent housing at the remote bases, isolated from existing communities, present-day realities suggest the advisability of locating highly-skilled, well-educated, well-paid, volunteer military personnel and families in nearby communities where they will find more diversified social, cultural, recreational and commercial opportunities than a base can ever provide.

Housing is only one necessity for ABM personnel. In all stages, the impact of both transient and permanent populations will also be felt as demands for additional classrooms and teachers and other educational facilities; medical, welfare and social services; recreation areas and parks; increased transportation services; and utilities including water supply and distribution, sewage collection, disposal and treatment, and solid waste disposal.

There are other unique aspects to this program. As a result of the foresight and initiative of the Department of Planning and Economic Development with the strong support of the governor and the state congressional delegation, it is the first time that the Department of Defense has made funds available to assist communities subject to DOD-caused impact in defining goals for the area and in implementing those goals. This impact study was initiated to find out what the impact will be; to examine existing local and regional conditions that will be affected by the program and, conversely, will significantly influence the basis for recommendations; to understand the objectives of various levels of public and private groups and individuals and, as important, the implications of these objectives; to develop and simulate alternative impact recommendations; to find sources for funding; and to devise a program for phasing and financing new facilities which must be developed to accommodate the additional population.

The recommendations contained in this report have been reached after extensive study by Wilsey & Ham, Foster City, Planning Consultants assisted by Morrison-Maierle, Inc., Helena, Engineering Consultants and T.A.P., Inc., Bozeman, Economic Consultants. In Phase I of this impact study, information was compiled concerning the existing natural and human aspects of the area and presented in the Resources Inventory Report. Later, several alternative concepts were developed to examine possible policies of concentrating or dispersing the ABM impact population. These concepts are described in Phase 2 Report, Initial Impact Alternatives.

This report represents work completed in the third and final phase of the study. In this phase, the initial alternatives were increased to 34. All alternatives - each representing different communities - were simulated to estimate the public and private investment levels that would be necessary to provide the infrastructure to produce specific regional development patterns in the future. The simulations ranged from high concentration - a population distribution very close to both military sites - to dispersion with the new population scattered at existing communities in the six-county planning area. These simulations formed the basis for the recommendations set forth in this report which call for a concentration of the ABM impact primarily in Conrad and secondarily in Shelby. Further, these recommendations point out the opportunities that ABM presents as an opportunity for revitalizing these communities as well as the entire six-county region.

THE CONCEPT

THE CONCEPT

The concept on which the recommendations in this report are based calls for a major concentration of the long-term ABM impact at Conrad with a smaller degree of concentration at Shelby. In the immediate future - the summer of 1972 and, to a lesser degree, the summer of 1973 - Great Falls will inevitably absorb a major portion of the influx. This will alleviate the strain on public and private facilities and services at the two towns near the construction site and will allow Conrad to build to meet the anticipated permanent population increase. But, for the later phases - beginning with the installation phase in 1974 and continuing perhaps for as long as 20 years with the arrival of the military and operations personnel in 1976 - the concept is a concentration of the major long-term increased population where public facilities already exist for that forecast level or where they can be provided most economically. At the same time, a concentration will draw together enough of a population to make feasible major new public improvements for permanent use for the community and the region during and even beyond ABM. Moreover, the concept provides for housing adjacent to Conrad which can be used in successive phases - first by installation workers, then by military operations personnel. When, and if, the ABM program terminates, this same housing will be located where it can be used by a community with the physical facilities and amenities which would attract permanent residents.

The policy of concentration was reached early in this impact study when several alternative concepts were considered as possible ways of directing the new regional growth. Each concept provided for different distributions of population. Several new town alternatives were developed. One was an isolated new town, another had new developments at both MSR and PAR sites, and a third was for an enclave at one site only. Complete, separate new towns would cause the least disruption to existing communities but they would prevent those communities from gaining populations which would actually be a positive asset. The factors which eliminated the new town alternatives were the necessity for substantial investments for costly duplication of utilities, school, health, and community services already available in nearby towns; isolation from normal community life and services; and the spectre of abandoned towns lying useless on the prairie if and when the ABM program terminates.

Another alternative was to disperse the new population among many communities. Many towns could absorb limited impact with little strain. Others, however, already operating at or beyond capacity, would be unequipped to handle additional demands on community services and utilities. Yet these towns, even with additional residents, would still not have the population necessary to require the massive upgrading of facilities to justify DOD funds or to be able themselves to finance improvement costs with local funds.

Another alternative, the concept of concentration, emerged as superior in the benefits it could bring to existing communities as well as to the new population and the military. By concentrating the stable long-term ABM

THE CONCEPT continued

population in Conrad, and to a lesser degree at Shelby, the impact would be intensified and localized. Even though these communities would have to make major improvements and additions to their existing physical plants, concentration would increase their present populations to levels high enough to make such improvements practical and to establish a sufficient tax base. Several improvements have already been planned and funded through federal and state agencies.

Concentrating the impact at Conrad and Shelby benefits the operations personnel by making possible shorter commute trips with resulting savings in expenses and time. The MSR site, 12 miles southeast of Conrad, is only a 15-minute drive over paved roads. Northeast of Conrad, 34 miles away, is the PAR site which can be reached directly on paved roads. When FAS #417 is blacktopped this summer, the driving time between PAR and Shelby will be comparable to the current commute time between PAR and Conrad.

Concentration of the long-term ABM population at Conrad takes advantage of existing and planned facilities and utilities. At Conrad the Department of Defense has already funded sewage treatment plant expansion, water distribution improvements and new high school facilities. Northwest of town there are 115 sewer and water outlets remaining from Minuteman construction occupancy and an additional 189 utility outlets are being installed directly north of town. More units are available at the U.S. Army Corps of Engineers site east of the Burlington Northern tracks. No other community in the planning area can provide immediate use of so many outlets for housing - first, on a short-term basis for temporary housing, then on a long-term basis converted to permanent dwelling use. A secondary concentration at Shelby utilizes the physical facilities and utilities that accommodated a higher population before a long-term out-migration during the 1960's. With its existing facilities Shelby can accommodate almost 1000 persons without having to make major investments.

Concentrating impact makes good sense even if the public costs are high. Concentration ultimately benefits both current residents and newcomers. The added persons increase resident population to the level where it is feasible to make long-term, major investments to improve the quality of life for living, working and playing. It gives Conrad the potential of being a new town, a center for other satellite communities, as well as a major satellite of Great Falls.

SUMMARY RECOMMENDATIONS

SUMMARY RECOMMENDATIONS

The recommendations in this report point out what additions and improvements need to be made for the concept to become a reality. If followed, they would bring the current level of accommodations and services in Conrad and Shelby to one which will be able to support concentrations of the forecast impact population. For smaller communities, recommendations are given for needed improvements for services which, in some cases, are barely adequate to support residents even now. These additions and expansions will improve the quality of life for these towns during and beyond the ABM program. For the region, the recommendations call for long-term services and facilities to provide a new standard of living for the six-county impact area to attract and hold the potential regional growth stimulated by the ABM program.

The major recommendations are summarized on the following pages by category - housing, highways, transportation, recreation, schools, sewer-water-solid waste, and social and planning considerations. Later in the report they are discussed in greater detail under Regional Aspects, and on a community-by-community basis under Local Aspects.

HOUSING

A concentration of permanent housing should be built at Conrad to avoid the tremendous expense of building isolated enclaves at the military bases and to offer a full range of normal community services and facilities to military and civilian personnel and their families. This housing should be built north and northwest of town as a planned unit development (PUD). As the short-term temporary housing used for construction workers at the old Boeing Campsite is phased out, this area, too, should be developed as part of the PUD. The PUD should provide a total of 843 dwellings -- 263 bachelor quarters and 580 single family residences. As the permanent housing is built in increments, it should first be used by the installation workers before the arrival of the military people.

Additional housing should be provided at Shelby - 95 bachelor quarters and 215 single family housing, which should also be built as a planned unit development.

HIGHWAYS

With road improvements already underway for I-15 and FAS #417, the pace and direction of new construction and paving should relate to the needs of both Minuteman and Safeguard systems. A program should be developed and funds allocated toward paving a network of roads to serve all military installations in the area.

A highway program should also relate to farm needs and recreational and public transportation potentials as well as to private automobile and truck traffic demands. Paving the unfinished portion of FAS #225 from the Cascade - Chouteau County Line to FAS #457 and paving FAS #457 between the PAR site and FAS #223 would help to accomplish these objectives.

TRANSPORTATION

The existing commuter bus service, The Missile Messenger, between Great Falls and the two construction sites, should be expanded as demand requires and as additional work shifts are added.

School, recreational and commuting transportation demands should be integrated into a coordinated public regional transit system.

Instead of improving several airports in the impact area, it would be a more economical use of funds to develop a regional airport facility located between Conrad and Shelby to serve both civilian and military needs.

PARKS AND RECREATION

A study should be made of Conrad's needs for children's play areas and parks.

The recreational potential of Lake Frances for boating, water sports and picnic facilities should be planned and developed for the benefit of residents at Valier and in the neighboring communities, but not to the detriment of service as a domestic water supply source.

Liberty County, in conjunction with the State Fish and Game Department should prepare a County Recreation Plan to accommodate the regional demands that will be made on the Tiber Dam and Recreation Area by ABM impact as well as others. Upgrading and improving this area, regardless of the ABM project, would enhance the position of Liberty County as a center of recreation in the north central region of Montana.

SCHOOLS

The surge in population will bring many new school age children into the region. The expected requirements for educational facilities at the elementary, junior high and high school levels are summarized in the following table.

ADDITIONAL CLASSROOMS AND TEACHERS

	K6 1/		K8 2/		JUNIOR HIGH		HIGH SCHOOL	
	CLASSROOMS	TEACHERS	CLASSROOMS	TEACHERS	CLASSROOMS	TEACHERS	CLASSROOMS	TEACHERS
CONRAD			14	14			13	13
SHELBY	7	7	-	-	0	0	4	4
BRADY			2	1			1	1
VALIER			1	1			1	1
CHESTER			0	1			0	1
GREAT FALLS	0	0	-	-	0	1	0	1

1/ Kindergarten through 6th grade
2/ Kindergarten through 8th grade

SCHOOLS continued

It is impossible to build to accommodate the peak population expected in the 1972 construction phase. Fortunately, the peak period occurs during the summer months when school is not in session. But the winter requirements are still substantial. Given the constraints of necessary design time, funding, and short construction seasons it is unrealistic to expect to meet even some of the post-peak, short-term requirements. However, the building of educational facilities should commence promptly to benefit as many children as soon as possible. The educational facilities recommended here are for the long-term military and operations phase population as well as for the natural population increases forecast for Conrad and Shelby. They also reflect the need to replace and improve existing school facilities where present ones are obsolete or already inadequate. These recommendations are based on population forecasts shown in Appendix Table A.4 with an equal age distribution by grade of age 1 through high school: 25% preschoolers, 50% in grades kindergarten through 8th and 25% in grades 9 through 12.

SEWER

Conrad

To supplement the sewage treatment lagoon expansion already funded with DOD monies, Conrad should add a new 16-inch interceptor for servicing the area northwest of town where additional housing is recommended.

Shelby

Shelby needs a preliminary engineering study to determine its exact needs.

Great Falls

Great Falls existing system is adequate to provide service for the temporary short-term influx of popualtion. Funds will be needed for additional operating and maintenance expenses.

Brady (unincorporated)

Although Brady's present 2.74-acre lagoon will be adequate for the construction peak population of almost 300 persons, when lagoon expansion is planned, it should provide at least 2 additional acres to effect economies of scale.

Valier

Valier may need additional operating and maintenance funds.

Chester

Chester's existing 9-acre sewage lagoon should be expanded to at least 10-acres to handle the anticipated construction peak population.

WATER

Conrad

Conrad's water system needs to be increased to provide service for the concentration of population. A 10-inch water main loop to serve the northwest of town and a 12-inch transmission line from the intake on Lake Frances to the water storage area were funded with DOD funds in July 1971. Application has been made for a one-million gallon steel ground water tank.

Shelby

Shelby would require only minimal expenditures to finance increased operating and maintenance expenses that would be expected with increased population.

Great Falls

Great Falls will be able to accommodate the increased population with its present water system. Additional operating and maintenance funds will be needed.

Brady (Unincorporated)

Brady will require some extremely expensive improvements and additions to its water system in order to accommodate any new population. The system is barely adequate to service the present residents. Additional winter storage is needed as well as a water treatment plant. These costly improvements have been a major factor in cautioning great discretion in further development at Brady and in recommending concentration at Conrad and Shelby.

Valier

Valier will need an additional 140 gallon-per-minute source of water, based on a desirable design flow of 500 gallons-per-capita per day. If water rights to Lake Frances can be obtained, this should be done as the quality of water from the lake will be better than that obtained from wells.

Chester

Chester may require additional operating and maintenance funds for its water system.

SOLID WASTE

Regional - 6-County Impact Area

In the six counties of the study area - Cascade, Chouteau, Liberty, Pondera, Teton and Toole - one or two Refuse Disposal Districts could conceivably be created within a given county under the provisions of Section 69 of the Revised Codes of Montana which provides for the formation of a Refuse Disposal District by resolution of the County Commissioners after a series of hearings and petitions. The State Health Code requires sanitary landfill. Local governments should explore joint military/cilivian use and financing of this service.

ABM Sites

Some means of disposing of solid waste need to be provided at both ABM sites. The military and civilian community systems should be combined where possible, making use of the military equipment and manpower to help where the communities cannot afford these services.

Conrad

Conrad's solid waste disposal facilities need to be improved. Funds have already been obtained from the Department of Defense. Long-range development of an expandable and environmentally acceptable system must be part of a regional solid waste disposal solution.

Shelby

Shelby will require additional operating and maintenance funds.

Great Falls

Great Falls will require additional operating and maintenance funds.

Brady (Unincorporated)

Equipment, fencing, site preparation and other materials are needed to provide a satisfactory sanitary landfill at Brady.

Valier

Valier will require additional operating and maintenance funds.

Chester

The potential population increase at Chester will seriously aggravate present solid waste problems. A bulldozer, site preparation, fencing and other materials are needed to provide a sanitary land fill.

SOCIAL CONSIDERATIONS

To reduce local unemployment, contractors should be encouraged to employ local residents following precedent set by unions in other parts of the country of bringing in local residents after relatively short training periods.

An additional person should be added to the State Employment Office in Great Falls to deal with the increased volume of employment and unemployment problems arising from the ABM program.

An employment field office should be opened in Conrad. This should be established early in the ABM program to keep abreast of the changing picture of employment, unemployment, earnings, migration, housing and public assistance and cost of living.

Local welfare agencies should be prepared for an increase in people seeking aid. Many of the low-income families attracted by the potential for work in the area may depend on these agencies for many services for family members of all ages.

The recommendations of the Governor's Crime Control Commission should be implemented to increase manpower commensurate with the population increase and to improve and add to current facilities and equipment.

PERSONNEL

The State of Montana through the Governor's ABM Coordinating Committee should continue to support the impact communities. The ABM Coordinator and his staff should be retained in the State Department of Planning and Economic Development through the construction, installation, and operational checkout phases. Whenever possible, the planning staff of the Department of Planning and Economic Development should provide technical services to the jurisdictions concerned.

REGIONAL ASPECTS

HIGHWAY
PUBLIC TRANSPORTATION
AIR TRANSPORTATION
RECREATION
MEDICAL
SERVICES
WELFARE
PUBLIC PERSONNEL

REGIONAL ASPECTS

The growth of the six-county area that is being stimulated by the ABM system construction and permanent operations brings with it increases in population sufficient to warrant some long-term improvements to the region. At the same time, the immediate flood of population in 1972 and again in 1973 will strain, if not completely overburden, some regional facilities. Recreation areas in particular will feel the effects of high demands from the impact people and this will be aggravated by the normal tourist season use. Other regional services will undoubtedly feel the effects -- recreational and construction medical needs, air travel, law enforcement, and welfare agencies. Construction work on I-15 and the paving of FAS #417, a major access road between Shelby and both military sites, will probably cause bottlenecks and delays as traffic increases during the summer.

Although the initial population surge will recede as the construction phase concludes and the installation and operations phases begin, the region will still be left with 3500 new people drawn by the ABM project. Over 3000 of these newcomers are expected to concentrate in Conrad and Shelby.

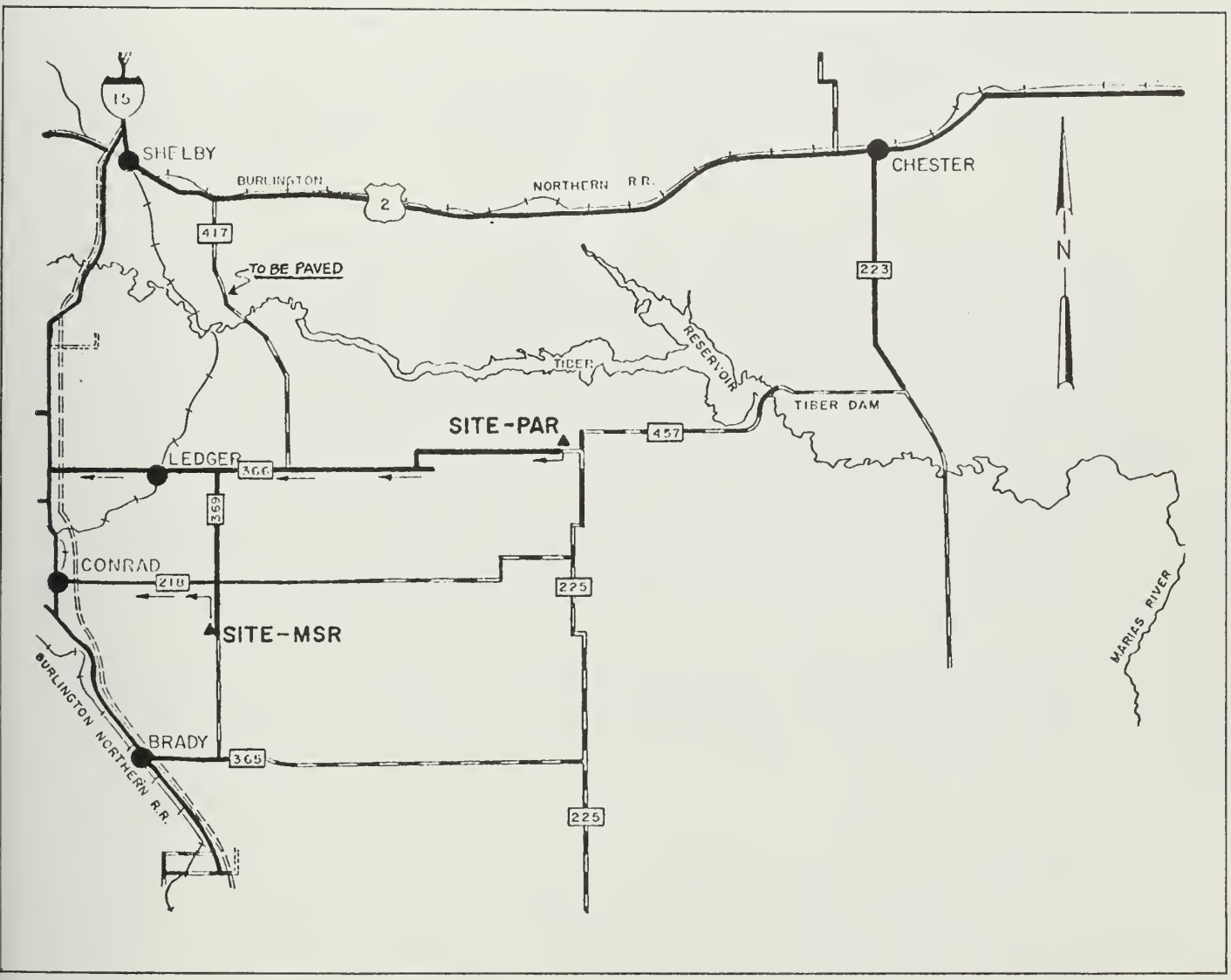
The improvements which can be made should benefit those living in the region and those who will be attracted to the region. The concentration of population into one area, the combined working, buying and recreational needs of existing and new populations create a synergism that should be used to ultimate advantage to procure and develop regional facilities.

HIGHWAY

Regional highway improvements are already in progress and would probably continue regardless of the ABM installations. Portions of Highway I-15, the primary north-south route between Great Falls, Conrad and Shelby, are presently being constructed to four-lane Interstate Highway standards. Other parts of this route, which extends from Southern California to the Canadian border, are planned for improvement to full four-lane standards by 1976. Another route, FAS #417, between FAS #336 and Route 2 (The Hi-Line) has already been widened. When it is blacktopped, as scheduled during the summer of 1972, the commute time between Shelby and the PAR site will be comparable with the present driving time between Conrad and PAR.

With these road improvements underway, the pace and direction of new construction and paving should relate to the needs of both Minuteman and Safeguard systems. Supply, modification, and updating of both systems will continue for the life cycle of these systems ... estimated at 20 years or longer. A program should be developed and funds allocated toward paving a network of roads to serve all military installations within the area.

MAJOR FEDERAL, STATE & LOCAL HIGHWAYS
CONRAD - SHELBY AREA
1971



HIGHWAY continued

A highway development program should also relate to farm needs and recreational and public transportation potentials as well as to private automobile and truck traffic needs. Paving Highway FAS #225 and Highway FAS #457 would make the Tiber Dam Reservoir and Recreation area more accessible for recreation. FAS #225 (Bootlegger Trail) is already paved from Great Falls to the Cascade -Chouteau County Line. All that remains is to blacktop the gravelled portion north to FAS #457. Paving the 20-mile section of FAS #457 between the PAR site and FAS #223 would open the Tiber Dam area to more people from Chester via Route #223. Faster, easier driving to the area on FAS #457 would also help attract tourists using Route 2, the heavily travelled east-west route between Minnesota and Seattle which provides direct access to Glacier National Park. Increasing accessibility to this recreation area from both the north and south would strengthen the position of Chester and Liberty County as a recreation center in North Central Montana even beyond the ABM program.

PUBLIC TRANSPORTATION

Regional public transportation, at least on a limited scale, is a possibility with an expanded population. The concentration of employment at the two Safeguard sites already generates sufficient patronage volumes to warrant commuter bus service. The new service, the Missile Messenger, operates from Great Falls. Using two 48-passenger Greyhound-type coaches, it provides round trip service daily via Conrad. Departing from Great Falls at 6 a.m. for the PAR site and 6:20 a.m. for MSR, the buses return in the evening at 6:10 p.m. and 6:30. Plans are being made to expand the service when the projects begin extra shifts. These shuttles offer an economical means of commuting with travel times the same as, or closely competitive with, private auto transportation. This service also makes it attractive for temporary construction phases workers to live in Great Falls. This reduces the immediate impact in Conrad, temporarily diverting some of the new population and giving the town time to prepare for later phase impact.

A combination of school movements, group recreational needs and the commuting worker demands should be integrated into a coordinated public regional transit system that will be more convenient, safer and less costly than private automobile transportation.

AIR TRANSPORTATION

With an influx of population, an increase in travel demands by the military, and added recreation demands on the Tiber Dam and Lake Frances areas, a regional airport becomes a definite consideration. Initially it would be slightly less expensive to improve the existing airports at Conrad and Shelby than to build a completely new regional facility. But, in the longer run, the costs of operating and maintaining one airport could be expected to be

AIR TRANSPORTATION continued

substantially less than continuing to operate two separate facilities. The quality of regional airport service could be significantly superior to that of two separate and smaller airports. The rate and volume of use associated with a slightly larger airport for the region to serve a larger population base are also important considerations. Contrary to the recommendations in the Conrad General Plan for improvements to the town's existing facility, the airport should be moved from Conrad to eliminate the severe hazard of the existing approach pattern at low altitudes directly over the hospital. A regional airport, located between Conrad and Shelby would accomplish this objective and, at the same time, serve the business and governmental interests of both towns. Air traffic now dispersed to both communities redirected to one regional facility and the expected increase in air transportation demands generated by the ABM project and population should provide a rate and volume of use to justify and support a quality regional facility.

RECREATION

The added population increases pressures on regional recreation facilities and, at the same time, presents new opportunities for improved and expanded services. There will be many new demands for large-scale uses such as fishing, boating, swimming, camping, hunting, trailer and camper truck parking and travel. Some of these outdoor needs can be met by the Tiber Dam Reservoir and Recreation Area and by Lake Frances. But these facilities need further development in order to serve the impact population as well as tourist requirements emanating from neighboring regions.

As the 1972 and 1973 late spring, summer and early fall impact population arrivals reach the area and find Conrad filled to capacity, it is likely that many single workers and families, especially if they have travelled with mobile campers, will decide to camp as close to Conrad and the worksites as possible. These new demands added to normal seasonal tourist camping demands may very likely strain - if not altogether exceed - the capacities of present camping facilities. New camping sites would help accommodate this influx and could be used after the peak has subsided to attract additional tourists. Alternately, it may be necessary to place strict limits on the numbers of campers and designate areas where they may camp to preserve the natural attributes of the area from excessive use and possible irreparable damage. Additional ranger staff and sanitation service personnel will undoubtedly be needed to patrol and service park areas.

MEDICAL

Regional medical facilities already exist at Great Falls and can provide many of the specialized treatments that may be required by the new population. What will be needed closer to the center of the ABM impact area will be facilities to treat emergency cases and the general medical needs associated with a much larger local population. Increases in recreational development will add to the need for emergency facilities. Preventative health care, rehabilitation and convalescent care will also be needed. These facilities should be expanded in the county seats - particularly in Conrad, Shelby, and Chester. The extreme expense of such facilities argues for combining fiscal resources and providing some of these services on a multicounty or microregional scale.

SERVICES

Regional services, such as law enforcement, fire protection, solid waste, libraries, public health, employment, and housing can all function more effectively if they are consolidated. The several counties already have some of these services. But none of them has all the services nor is it likely that they will all be able to afford them individually. Only by sharing regional facilities can they provide for these community needs. The ABM impact brings with it the opportunity to organize on a sufficiently wide geographic and fiscal scale to provide these services.

WELFARE

An important consideration to plan for is an expected increase in the number of people who will be seeking aid from various welfare programs. Historically, large-scale construction projects draw many low-income families. The family members, ranging from infants to elderly with children of all ages and often expectant mothers, require specialized care or treatment. The wage earners, lacking particular skills, vie for a limited number of jobs which attract an oversupply of applicants. Without cash reserves and the ability to cope in a new environment, these families rely heavily on local welfare agencies which become overburdened with the new demands in addition to their existing work load. A regional Council could coordinate a welfare program which combined county welfare offices, SRS, employment services, vocational education and extension services.

PUBLIC PERSONNEL

Each city, town, and county anticipating new development from ABM impact should evaluate its capabilities to meet new demands for administrative and technical personnel. Additional local government staff will probably be required to administer zoning and subdivision regulations, building codes and permits, sanitation codes, and public works. City and county clerical staff may also need to be augmented. If Conrad almost doubles in population as expected, the increase in building alone will require additional staff for building inspection and

PUBLIC PERSONNEL continued

permits, sewer connections, and fire and police protection. Furthermore, it is also unlikely that many key recommendations contained in this report as well as those made in the Conrad and Shelby Comprehensive plans can be carried out unless these towns have the services of a full-time, locally employed planner with sufficient staff. These personnel requirements could be met in various ways: jointly through Interlocal Agreements as provided by Montana State Law, on an individual basis, or as staffing for the Interlocal Commission as proposed in the Implementation Section of this report. ABM Community Assistance Funds should be sought for additional city and county staffs to serve additional needs produced by the ABM impact population.

Regional solutions are as much a state of mind as anything else. They require thinking as a region rather than as independent, isolated, and often competitive communities. Unless regional opportunities can be demonstrated qualitatively superior and, at the same time, fiscally and administratively more economical, each county and city will continue independently to provide necessary services when, in fact, there can be better alternatives through concerted group action. The democratic home rule process that is so strong in the region need not be lost if the regional goals emphasize common rather than conflicting objectives.

A regional growth development plan with all entities participating is needed and should be immediately developed under existing multijurisdictional organizations of local government and other units which are legally possible.

LOCAL ASPECTS

CONRAD
SHELBY
OTHER COMMUNITIES

- Great Falls
- Brady
- Valier
- Chester

LOCAL ASPECTS

On the local level the effects of the ABM program are already being felt. As construction workers have poured into the area since late 1971, Conrad has received the initial brunt of the impact. Its proximity and accessibility to both Safeguard sites make it a prime location. Even now its facilities are stretched to the limit and workers have had to locate in other communities at greater distances from the sites. With more workers and families due in the next few months, the prospects point to a continuing short-term overflow situation where most of the ABM people are faced with the necessity of seeking accommodations beyond Conrad until additional housing is provided there.

Most people are heading to Great Falls which is expected to absorb over 4000 people during the 1972 peak period. The available supply of housing and other services will draw about two-thirds of the short-term influx to that city. Some of the other newcomers will locate in Shelby. A number of individuals, particularly men without families, will find accommodations in farmhouses in the area. During the warm summer months, many workers and families may camp in camper buses, trailers, and trucks. Others will scatter to Brady, Valier, Chester, and Choteau, and even as far away as Cut Bank and Sunburst. But the total numbers that these communities will attract will be proportionately small and limited. Remoteness from the sites necessitating long commuter trips will be a restraining factor for an influx at Cut Bank and Sunburst. The lack of completely paved routes to the work sites will limit the population attracted to Chester and, until FAS #417 is paved, Shelby. And all these communities, including Brady, Valier,and Chester, are extremely limited in their residential and public services capacities. Thus, the greatest short-term population wave will break upon Great Falls. But the immensity of the impact and its potential repercussions will be mitigated by the size of that city and the ready availability of accommodations.

As the ABM program continues into the installation phase and operations period with the overall population increase stabilizing, Conrad will have an opportunity to become a revitalized town. Its proximity and accessibility to both missile sites and the public improvements that have already been funded to increase the town's capacity make the town a natural residential choice for many of the long-term personnel. Shelby, too, will experience some marked changes, but the effects will be on a considerably lesser scale. For the other communities in the impact area, the long-term effects will probably be quite minimal. The same factors that restrained short-term impact ... remoteness, long commutes, and lack of municipal capacities - will also limit long-term impact. Once Conrad has completed sewer, water, and school improvements and has added a varied supply of housing the town will attract the permanent personnel. The major influx that descended upon Great Falls during 1972 and 1973 will recede leaving the city with just slightly more population than could be expected with a normal growth rate.

LOCAL ASPECTS continued

The recommendations in this report for local communities were developed after extensive study of a range of impact alternatives. These alternatives represented different hypothetical distributions and intensities of impact on the communities. Some alternatives concentrated workers in communities near the PAR and MSR worksites. Other alternatives were various patterns of dispersal of the new population scattered in many communities. These simulations studied 34 communities in the six-county planning area. All of the communities had populations of more than 150. In addition, simulations were made of three very large communities in neighboring Glacier and Hill Counties.

The concentration alternatives reflected an assumption that workers would prefer to live near the worksites to reduce travel time and expenses. Consideration of long and - in the winter - hazardous commutes to the worksites further supported concentration unless an innovative transportation mode could be devised which would alter workers' assumed commute preferences.

The simulation model was exceedingly useful as a planning tool in evaluating the advantages and disadvantages of each alternative. It made it possible to identify the level and distribution of the implied public and private costs which could result from each simulation alternative. Public costs included the expansion of facilities and equipment and the cost of added services, operation, amd maintenance over the planning period for the following sectors: elementary schools (K6, K8, and JHS)* and high schools; public services (administration, police, fire); sewer, water and solid waste; and medical health services in hospitals. Private costs included costs to develop the commercial and amenity resources for the impact population as well as residential resources using different housing technologies. Travel time was an important private cost which reflected assumptions of workers' preferences about commuting time. These assumptions supported impact concentration.

Concentration of new housing in Conrad can produce the economy of centralization. It also makes it possible to build accommodations which can be used successively - military and civilian operations personnel can move into the same dwellings formerly occupied by installation workers. And, a concentration of a variety of housing - single family homes, town houses and apartments- can produce the economy of long-range use giving the town the ability to attract permanent residents long after the ABM program has concluded.

Concentration in Conrad, and Shelby too, will intensify and localize the impact. Both communities already have many facilities and utilities sufficient to accommodate a significantly increased population. Nonetheless, Conrad and Shelby will still have to provide additonal public, cultural-social, and recreational amenities. But the concentration of population brings the population to a level which can justify major improvements to public facilities,

---

* K-6 Kindergarten - 6th grade
K-8 Kindergarten - 8th grade
JHS Junior High School

LOCAL ASPECTS continued

services and equipment which would be of long-term use to the communities and to the region beyond the ABM program.

CONRAD

It is clear that Conrad is just beginning to witness a new era of rapid and dramatic change stimulated by the ABM program. As the town closest to both the MSR and PAR sites with facilities existing or planned for an increased population, Conrad can expect to attract the greatest part of the influx. In the short-term the city's capacities will be overburdened. But, as public utilities and services are added and new housing provided, the town will have the potential to develop into a satellite center for other communities and become a major outlying center of Great Falls.

Already Conrad's population has soared from the 1970 Census count of 2945 to about 4400 in the second quarter of 1972. As additional temporary housing is brought in, and as more permanent housing is added, the population of the town will continue to increase consistently. In 1974, Conrad's ABM population should stabilize at around 2300 although the town will still undergo two waves of population influx. When construction workers leave late in 1974, a portion of them will be replaced by installation people who later will be replaced by permanent military and civilian operations personnel in 1976. Thus, the in-migrations will be counteracted by the out-migrations.

Conrad, the county seat and only urban area of Pondera County, has been experiencing a steady population increase. This is consistent with national migration patterns of population shifts from rural areas to urban centers. If this present trend continues, Conrad can expect an increasing natural population in the coming years, regardless of the ABM program.

Population Forecast

Second Quarter	Additional ABM Impact Population	Natural Conrad Population Without Impact	Total Conrad Population
1970 Census	-	2945[1/]	2945[1/]
1972	1300	3100	4400
1973	1985	3171	5156
1974	2300	3244	5544
1975	2300	3319	5619
1976	2300	3395	5695

1/Footnote 3, page 5

CONRAD continued

These forecasts are somewhat lower than the population estimates in the 1971 Conrad Comprehensive Plan which show the town's population ranging from 5755 to 7359. Although they are more conservative, The Wilsey & Ham estimates still provide a solid basis for augmenting Conrad's present public facilities and utilities to transform the community into a larger and more diversified community. The restraint they imply will help curb excessive development thus keeping new improvements within a viable range in the event that the ABM program should unexpectedly terminate.

What can be said with certainty is that how much population Conrad does attract will be due, in part, to the kind and number of facilities that are added. And, the greater the population, the more justification there is for making long-term investments. As a result, it will be sound policy to draw as much of the impact population as possible to Conrad and concentrate public improvements where the greatest number of people can take advantage of them.

Compared with the rest of the six-county impact area, Conrad's ABM impact experience throughout the program will differ. Although the town's facilities will be saturated throughout the construction phase, only about 25 percent of the newcomers will be living there in the short-range. Most will be drawn to Great Falls which is expected to accommodate over 4300 persons or almost 70 percent of the peak population in the second quarter of 1972. As the first phase ends, the situation almost reverses as Conrad will accommodate over three quarters of the impact people. At the same time, Great Falls will lose about 4/5 of the original temporary influx. The greater percentage of impact population that Conrad will accommodate will be due primarily to the addition of new housing units and public utilities and facilities increasing Conrad's capacity. But there will also be a general impact population dip as the construction workers leave. Although installation workers and later operations personnel come into the area, the impact population does not soar to the peaks of 1972 and 1973.

Second Quarter	CONRAD POPULATION		REGIONAL POPULATION	
	Total	Impact Portion	Total	Impact Portion
1970 Census	2945 1/	--	109202	--
1972 2nd Qtr.	4400	1300	114912	5022
1973	5156	1985	116246	6047
1974	5544	2300	113485	2977
1975	5619	2300	114408	3590
1976	5695	2300	115101	3973

1/ Footnote 3, page 5

Residential

Newcomers have been arriving at Conrad since late in 1971. Many are using the 115 mobile housing units that the contractor, Peter Kiewit, is installing at the old Boeing Campsite northwest of town. Another 189 mobile units are under construction north of Conrad and some units are available east of the Burlington-Northern railroad tracks. Together these sites can accommodate more than 300 temporary housing units until more permanent dwellings can be built.

Many people have found transient accommodations at Conrad in hotels, motels, boarding houses and rented rooms. Some individuals have probably found shelter in outlying farmhouses. As summertime population comes into the area, many will probably arrive with camper buses, trucks and trailers and will use them to live in during the warm months. At the time of the 1970 Census, Conrad had about 30 vacant dwelling units. On the basis of 3.4 persons/household, these units will accommodate over 100 people.

For the short-term, it is difficult, if not impossible to estimate the actual breakdown between number of workers and families who will actually be living in Conrad. How many workers will be living in the mobile units will depend upon how many families are occupying these units. Whereas two, three, four or possibly even more workers might share one mobile unit, a family with only one worker would require an entire unit. Further, the peak season is so short that many workers may leave their families behind for the month or two that they will be in the area. Or, those who do arrive with families may choose to live in Great Falls where their wives and children can enjoy the amenities that a larger city offers.

For the long-term, however, it is easier to forecast the ratio of families to single men. Contractors with similar experience have provided basic data for assumptions that a higher ratio of families to single workers can be expected in the area for long-term or permanent employment. Beginning in the summer of 1972, incremental building of permanent housing should begin near the Boeing Campsite and in the area extending beyond it. Increments and target dates are shown below.

Year	Mobile Homes		Permanent		Total
	Bachelor	Single Family	Bachelor	Single Family	
* 1972	143	340		-	483
** 1972	-	-	80	150	230
1973	-	-	40	100	140
1974	-74***	-176	100	150	-
1975	-57	-136	43	140	-10
1976	-12	- 28	---	40	0
			263	580	843

* Expected installation by end of Second Quarter 1972
** Second half 1972
*** Negative numbers are mobile units being phased out

Residential continued

This permanent residential development should begin at the Boeing Camp area extending beyond it northwest of Conrad to take advantage of the utility improvements which will be located there. If there is sufficient demand as the ABM project progresses, this area could extend around the north of town eastward to the U.S. Army Corps of Engineers site across the Burlington-Northern tracks. As the permanent housing is developed, the temporary mobile housing should be phased out in 1974, 1975 and 1976 as shown on the previous table. The improved lots can then be used as part of the site for later increments of permanent housing. The permanent housing, which should be ready for the arrival of installation workers, should be ready for the arrival of installation workers, should be designed for and made available to the military and civilian operations personnel when the installation phase is complete.

Permanent housing should be planned on the basis of Planned Unit Development Zoning (PUD). The PUD is a zoning innovation. While maintaining an average overall density limit, the PUD eliminates arbitrary lot restrictions. Thus, a mix of residential units can be provided - single family homes, town houses, and a variety of multifamily apartments. Moreover, these units can be clustered to gain large areas of open space that can be used as parks, playgrounds and tot lots. The overall amenity and quality of living that can be realized with a PUD can be further enhanced by undergrounding power lines and telephone wires.

PUD will provide the variety of residential types required by the population mix generated by the ABM project. Families will generally require single family houses. For single men, two types of bachelor quarters should be made available. One would offer group dining facilities, the other would be a unit with private cooking facilities like a studio or one-bedroom apartment. Using PUD zoning, the mix of residential types that should be provided at Conrad should provide:

Single Family	Group Bachelor	Apartment Bachelor	Total
580	132	131	853

These recommendations for total number of planned unit development residential units are based on the expectancy that temporary or seasonal workers will tend to seek transient facilities - rooming houses, motels, hotels and other converted space - in Conrad and Great Falls. Thus there are some restraining factors on recommended development to avoid potential problems of over-developing.

A mix of well-designed, varied housing at Conrad is particularly important during the installation and operstions phases. Unless enough quality housing is provided to suit individual requirements, the additional population can be

Residential continued

expected to seek suitable housing in other communities. Many of these communities - particularly, Brady, Valier, and Chester- do not have the municipal services on the scale that would be necessary for large -scale new development. And, lacking necessary services and amenities, it is unlikely that these communities would be able to attract enough new population to make major improvements feasible. In the long-distance future, a quality housing mix at Conrad, recommended as a planned unit development, would help attract some of the natural rural migration and contribute to Conrad's role as a new town and a satellite center of Great Falls.

Permanent housing for the installation and operation phases should be constructed by private developers 1/ and leased to the military installation and military operations personnel. Private development would make it possible to add to the tax base while, at the same time, might produce housing at a lower cost on a competitive basis. Further, housing could be built on demand as needed rather than all at once. In the event of an operation phase-out, this housing could then be used by nonmilitary population as a replacement to the local housing stock. If some type of modular housing is used it could be sold and relocated to other geographic areas.

Parks and Recreation

Conrad already has approximately 9.5 acres of parks in addition to a 23.5 acre ball park south of town. On the basis of a recommended 1.2 acres of parks per 100 population, the community will require about 25 additional acres of parks and open space by 1976. How this land is developed and where it is located should be predicated on the needs of the ultimate residents and users. The interim and ultimate populations will most likely differ in their recreation needs. For example, the major part of the short-term population will most likely be single men whereas in the long-run, it will be military personnel - mostly younger families with children - who will be living in the community. Their needs will be for tot lots and neighborhood parks geared to children of many ages. Some of this space can be provided by the PUD zoning in the new development recommended northwest of town. Indeed, the proximity of parks to residential developments is vital for mothers with infants in strollers and toddlers. It is equally important for older children to have outdoor areas where they can play vigorously and often near their homes. With a PUD, the developer and users will pay the costs of developing parks, recreation and amenities. The property is not taken off tax rolls and the costs are not public costs.

1/Appendix D describes how this kind of corporation could be formed.

Parks and Recreation continued

In consideration of the climate of the area, much of the recommended park and recreation area can be provided by indoor facilities. This would assure year-round use regardless of the weather. Such facilties could also be used in the evenings by adults and teenagers. Swimming, tennis, ice skating, gymnastics, and basketball are a few of the sports that can be enjoyed indoors.

Between now and 1976 when the demand will be greatest for these facilities, Conrad should begin a Capital Improvements Program to assure the availability and development of this land. Inasmuch as the anticipated growth will be the direct result of the ABM program, Conrad should seek heavy funding to provide the necessary facilities.

Schools

At the very least, Conrad should expect about 500 kindergarten through eighth grade children and 200 high school students from ABM impact families.

	K8[1]			HS[2]		
	Students	Classrooms	Teachers	Students	Classrooms	Teachers
Existing	820	38[3]	-	400	17[3]	
Impact 1972/73 1973/74	500	14	14	200	13	13
TOTALS	1320	52		600	30	

Recommendations for school facilties are based on several assumptions. Many workers in the short-term construction phase are very temporary. Many will be in the area only during the summer months when schools are not in session, And those who are working on the project during the school year may, if their stay is short enough, leave their families behind where children can continue at their own schools.

It is also assumed that there is a relatively even number of children in each age category from age 1 through 18. In terms of school grades, the distribution has been based on an assumption of 25 percent preschool, 50 percent K-8, and 25 percent high school.

Total numbers of children have been derived from average household size on the basis of 70 percent of construction and military personnel married and assumed to be distributed as follows:

1/K8 - Kindergarden through 8th grade
2/HS - High School
3/Messrs. Singleton, Rate, and Utterbach of Conrad schools indicate fourty-seven K8 and nineteen high school classrooms. This differs from the State. However, this reflects the student levels prior to 1972 and impact.

Schools continued

Children	Construction and Installation Families	Military Families
1	30%	25%
2	30%	40%
3	10%	15%
4	5%	5%
More than 4	Insignificant	Insignificant

Commercial

The new impact population will mean additional purchasing power for all kinds of goods and services. It will mean corresponding demands for food, clothes, hardware and automotive supplies and equipment. Families establishing households will require household goods and furnishings. The Conrad Comprehensive Plan describes the additions that are being planned to commercial areas - specifically along the east side of Main Street from Second Street south to the Interstate interchange and surrounding the interchange, Solid Road east of the Burlington-Northern tracks and another area along Front Street adjacent to the Western Montana Railroad right-of-way. The quality and location of new commercial development should be strictly controlled and designed for permanent use.

A consideration is the possibility of local inflation caused by sudden, high demand on housing, food, clothing and services. Local merchants will become major sources of credit for new consumer credit demands. But regional and national resources may be necessary to supplement local capabilities.

Utilities

Sewer

In Conrad, the sewage system is already operating below Montana Department of Health standards which call for one acre of sewage pond per 100 persons. Conrad's nonaerated lagoon now has only 18.2 acres for a capacity of 1820 population. It is severely overloaded and does not provide adequate treatment. A sewage treatment lagoon expansion was funded by DOD funds in July 1971. With a new 16" interceptor which we recommend to serve the area northwest of Conrad, the sewage capacity will be 7500. This is more than adequate to serve the expected population of more than 5700.

If the demand for housing pushes residential development beyond what is already recommended for the Boeing Camp area eastward toward the U.S. Army Corps of Engineers site, sewer extensions will be required as noted in the Conrad Comprehensive Plan.

Water

Although the Conrad water system can now accommodate 4200, it too will have to be increased to provide for the expected peak impact population total. A 10-inch water main loop to serve the area northwest of town, and a 12-inch transmission line from the intake on Lake Frances to the water storage area were funded with DOD funds in July 1971. Application has been made for a one-million gallon steel groundwater tank but this improvement has not yet been funded. With these improvements the water system will be capable of serving approximately 7200.

Solid Waste

Funds have been obtained from the Department of Defense to improve Conrad's solid waste disposal facilities. Development of this facility is urgent to support the increased population. Currently the Department of Defense plans to continue to share Conrad's solid waste site and to absorb part of the costs of its operation. Long-range development of an expandable and environmentally acceptable system must be part of a regional solid waste disposal solution.

SHELBY

The ABM program will have a significant effect on the City of Shelby. Forecasts estimate a long-term increase of 840 people. This is considerably lower than the 2300 new people forecast for Conrad. Nonetheless, it is almost one-fifth of the total regional forecast for the long-range impact population of 3973 in 1976.

Shelby, the major city of Toole County and the county seat, is located on the High Line (Route 2), a major east-west tourist road. Because a recent migration in the 1960-1970 decade reduced the town's population from 4000 to just over 3000, Shelby could easily accommodate some of the new people without making major improvements to its present water and sewer systems and school facilities. Undoubtedly, the town will absorb part of the impact population, especially the PAR site workers and personnel since the town is only 36 miles away - about the same distance as between that site and Conrad. Current driving time will be reduced when FAS #417, a recently widened access road between PAR and Shelby, is paved during the summer of 1972.

Population Forecast

Second Quarter	Additional ABM Impact Population	Shelby Natural Population Without Impact	Total Shelby Population
1970 Census	-	3111	3111
1972	300	3117	3417
1973	538	3120	3658
1974	762	3123	3885
1975	840	3126	3966
1976	___	3128	3968

These forecasts are somewhat lower than the population estimates in the 1971 Shelby Comprehensive Plan which estimated the town's population at 4490 by 1975. Wilsey & Ham forecasts average annual growth rate between 1950 and 1970. This average excludes the unusual rise and dip in population in the periods 1950-1960 and 1960-1970 and includes a longer, 20-year trend. The estimates in the Comprehensive Plan, on the other hand, used a higher natural average growth rate and an average of the average growth rate between 1950-1960 and 1960-1970. Moreover, the Comprehensive Plan population estimates were compiled before it became apparent that the major part of the long-term impact would be accommodated at Conrad and that Shelby's portion would be only as much as present capacities of the town can bear.

Residential

Shelby will be able to accommodate some of the impact population in existing housing scattered in the community. The town should begin now to examine the 35 vacant residences reported in Inventory Report #1 to determine which ones need to be rehabilitated for occupancy.

Residential continued

To provide for additional housing that will be needed, the town should begin a residential building program by the summer of 1972 and continue to build in increments as shown below.

	Additional Total Units	Additional Bachelor Units	Additional Family Units
1972	110	30	80
1972	78	20	58
1973	51	20	31
1974	51	20	31
1975	20	5	15
1976			
Total	310	95	215

These units should be planned on the basis of Planned Unit Development (PUD) zoning as recommended for Conrad. Although the area would be planned as an entity, building could still be accomplished in stages.

A mix of housing should be provided to offer a selection for the needs of families and single individuals:

Single Family	Group Bachelor	Apartment Bachelor	Total
215	48	45	310

In Shelby, as in Conrad, housing first occupied by the installation workers should be made available to military operations personnel when that phase begins.

A development corporation could be formed to construct the required housing.

Amenities, such as undergrounding of all power lines and telephone wires, should be part of any new residential development.

Schools

Even though Shelby was left with some unused facilities after the out-migration of the 1960's, it still will be necessary for a few additional classrooms to be added to accommodate the children who will be coming into the town with families drawn by the ABM program. The increase in school-age children and the necessary new classrooms and additional teachers are shown as follows:

Schools continued

	K6[1]			JHS[2]			HS[3]		
	Students	Classrooms	Teachers	Students	Classrooms	Teachers	Students	Classrooms	Teachers
Existing	447	17		162	12		393	18	
Impact	140	7	7	66	0	0	56	4	4
Total	587	24		228	12		449	22	

Recommendations for school facilities for Shelby have been based on the same assumptions that were described under recommendations for Conrad schools.

Utilities

Because its present population is less than the capacities of the existing systems, Shelby would require only minimal expenditures to finance increased operating and maintenance expenses that would be expected with increased population. These expenditures are itemized in Capital Improvements Targets and Strategic Plan and in Appendix B.

OTHER COMMUNITIES

The major portion of the long-term ABM impact will occur in Conrad. Another portion will be drawn to Shelby. The proximity and accessibility of these towns to both Safeguard sites, their existing facilities and the sewer, water, and school improvements already planned, funded and, in some instances, under construction, will naturally attract most of the new population.

In the short-term, when Conrad is saturated with new people, other communities will inevitably feel pressures from the spillover. Great Falls particularly will attract the major part - about two-thirds - of the construction phase population in 1972. 1970 Census of Housing data indicates that there are 1159 vacant dwelling units of a total of 20,755 in Great Falls. Should married worker families settle there, Great Falls could absorb almost 4000 of the impact population on the basis of 3.4 persons per household with the 1970 housing stock.1/ Thus, the immensity of the impact will be mitigated by the supply of housing and the availability of services in the city. Certainly Great Falls with its supply of transient facilities has already absorbed considerable population. Enough workers have settled there - even temporarily - to justify initiating a daily round trip commuter service between Great Falls and both missile sites. An expected increase in workshifts and population has already prompted plans to add more trips to the Missile Messenger coach service. The wave of population that breaks upon Great Falls will be short-lived and will recede as many of the construction phase workers leave the area and as Conrad adds more housing to accommodate the incoming installation and subsequent military and civilian operations personnel.

In both the short-term and long-range, some ABM impact people will disperse to other communities in the area. Personal preference and private development decisions will be influencing factors. Chester, Valier, and Brady, even Cut Bank and Sunburst, will also feel the effects of the ABM program. But if Conrad and Shelby attract as many of the long-term, long-range newcomers, especially the permanent military and civilian operations personnel, the new population increases that these communities can reasonably expect will generally be slight.

As a result, other communities should be extremely cautious about developing to any extent. Cut Bank and Sunburst are too remote from both work sites to attract many of the permanent population and thus will probably not be faced with the problem of expanding. Brady, Valier, and Chester are closer to PAR and MSR but with few services and little housing available, they cannot offer the life style that can be found in Conrad and Shelby where there are greater resources. Brady, Valier, and Chester are not equipped to handle significant population increases and would require more investment than warranted for utilities and improvements to community facilities. The extreme expense for major municipal improvements to make possible large residential development cannot

1/ Appendix A contains a discussion of average household size

OTHER COMMUNITIES continued

be justified as the communities still would not draw enough population in the longer run to support such expenditures or to justify DOD funds. The improbability that these communities could attract high levels of population, combined with the expense of providing the necessary municipal utilities and services were significant factors leading to the recommendation of concentration at Conrad and Shelby.

Without ABM impact, Brady, Valier, and Chester could expect to lose population gradually during the next few years. These forecasts, shown on the table following, portray a trend which is consistent with national patterns of migration from rural areas to urban centers. This local trend is in contrast to the forecasts for natural population increases at Conrad, Shelby and Great Falls. Thus it lends further support to the concentration recommendations for Conrad and Shelby and the recommendations for restrained development in the smaller communities.

If housing is not ready at Conrad, some long-term,permanent ABM personnel might be forced to disperse to Brady, Valier, and Chester. But, once additional dwellings are provided at Conrad and Shelby, it is not unlikely that some of these people would leave the smaller communities for the convenience and services that Conrad and Shelby offer.

Population Forecast

	BRADY		VALIER		CHESTER		Total 6-County
	Natural	Impact	Natural	Impact	Natural	Impact	ABM Impact Pop.
1970 Census	225		651		936		
1972 2nd Qtr.	219	75	644	150	887	75	6766
1973 3rd Qtr.	217	75	642	150	874	75	6047
1974 3rd Qtr.	215	75	639	150	855	75	2977
1975 3rd Qtr.	213	75	636	150	837	75	3590
1976 3rd Qtr.	210	75	633	100	820	75	3973

The minimal number of recommendations that are made for Brady, Valier, and Chester reflect the expectation that major long-term impact will be attracted to and accommodated at Conrad and Shelby. Moreover, it reflects the belief that this concentration should be encouraged in order to produce the population levels necessary to make the major improvements that new demands will require. In general, the smaller communities would best consider the advisability of absorbing only as much of the new population as their present facilities can accommodate. Alternately, smaller communities should consider investing in improvements and expansions only to the extent that these upgradings would be justified by a reasonably certain permanently increased population level.

Great Falls

In the short-term it will be Great Falls that will attract the greatest proportion of the ABM impact population. In 1972 about two-thirds of the newcomers will be living in Great Falls, drawn there by plentiful housing and other services and facilities. Great Falls is actually the only community in the six-county area that can immediately supply the quantity of housing that will be needed. In the long-term, however, this surge will recede and Great Falls will be left with an almost unnoticeable population increase from ABM.

Population Forecast	Great Falls Population Total Forecast
1970 Census	60,091
1972 3rd Quarter	65,731
1973 2nd Quarter	64,574
1974 2nd Quarter	62,320
1975 2nd Quarter	62,844
1976 2nd Quarter	63,506

A direct relationship can be seen between the tremendous short-term influx at Great Falls and the increasing ABM population at Conrad and, to a lesser degree at Shelby. As the initial wave of construction workers leaves the area, the ABM impact will naturally dwindle. With the arrival of the installation workers in 1974, ABM impact will surge again. But, by then, it is expected that Conrad will have added to its supply of housing so that more of the second phase - and later, third phase - workers will be able to live closer to the worksites. Shelby, too, will attract more of the new population. After FAS #417 is paved and travel time from there to the PAR site is comparable to the travel time between that site and Conrad, Shelby can expect to draw a significant number of new people.

Population Forecast

	Great Falls Total Pop.	Conrad Total Pop.	Shelby Total Pop.	6-County Total Pop.
1970 Census	60,091	2,945	3,111	109,202
1972 3rd Qtr.	65,731	4,565	3,468	116,734
1973 2nd Qtr.	64,574	5,156	3,658	116,246
1974 2nd Qtr.	62,320	5,544	3,923	113,031
1975 2nd Qtr.	62,844	5,619	3,966	114,408
1976 2nd Qtr.	63,506	5,695	3,968	115,101

Schools

Because of its size, Great Falls can accommodate the expected additional children. However, more teachers will be needed:

Elementary	Junior High School	High School
2	1	1

As this final report was being prepared, a change in the demographic composition of households indicated that more teachers, in addition to those recommended above, would be needed. However, at this point (April 1972) it is impossible to estimate how many more will be necessary. The forecasted spillover impact of more than 4300 people is expected to occur in Great Falls during the summer of 1972 when schools are not in session. In the last quarter of the year, the impact drops to around 2800. But, the extremely temporary nature of the construction jobs makes it difficult to predict how many workers' families will return to their own home communities once the school year begins again. Thus teachers will have to be hired on a contingency basis. The new assumptions for household size and distribution do not affect classroom recommendations as Great Falls will still be able to accommodate the additional children with its present facilities.

Utilities

Great Falls will likewise require only minimal funds to finance increased operating and maintenance expenses that can be expected with increased population demands. These are outlined in Capital Improvements Targets and Strategic Plan and Appendix B.

Brady

Extreme discretion should be given to attracting ABM impact to Brady. The community is already operating almost at the full capacities of its water and sewer systems and would be unable to handle any significant population increase with its present utilities. It would be extremely expensive to attempt to expand these services to accommodate a major population influx. Expansion is further complicated because Brady is not incorporated and therefore dependent on County Improvement Districts for sewer, water, and solid waste services.

Nevertheless, Brady will inevitably attract a very small portion of the ABM population. But this increase comes at a time when the community is actually losing its resident population gradually to larger urban areas. Demographic trends forecast a continued population decline in Brady and other smaller rural areas. Thus, even if a portion of the ABM impact people remained, it is reasonable to expect that the natural population would dwindle.

Brady continued

1972 Natural Population	Additional Impact Population	1972 Peak Total
219	75	294

Schools

To accommodate additional children from the impact population attracted to Brady, the town will require additional classrooms and teachers:

K-8 1/		High School 2/	
Classrooms	Teachers	Classrooms	Teachers
2	1	1	1

One more classroom than teacher is recommended for the kindergarten through junior high school level. This will supply slightly more capacity than initially needed and can be staffed when demand requires it.

Utilities

Sewer

The present 2.74-acre lagoon will just be adequate for the construction peak of 300 persons.

Water

The anticipated population increases from ABM will necessitate additional winter storage for Brady's water system since the present reservoir will serve only 280 people. An additional capacity reservoir will be needed. Brady also needs a water treatment plant. Water system improvements are extremely expensive for Brady and are recommended only as a very discretionary expenditure as specified in the Capital Improvements Targets and Strategic Plan and Appendix B.

Solid Waste

Equipment, fencing, site preparation and other materials are needed to provide a satisfactory sanitary land fill at Brady. As an economy measure the town could consider combining services with other nearby communities such as Conrad and the MSR site facilities.

1/Kindergarten through 8th grade
2/High School

Valier

Valier is also expected to receive a small portion of the impact population.

1972 Natural Population	Additional ABM Impact	1972 Peak Total
644	150	794

Schools

Valier will require additional schools facilities and teaching staff in order to serve the expected population.

K-8 1/		High Schools 2/	
Classrooms	Teachers	Classrooms	Teachers
1	1	1	1

Utilities

Valier will need substantial improvements to utilities in order to serve the projected population increase. These are detailed in Capital Improvements Program Targets and Strategic Plan and in Appendix B.

Water

To serve the estimated population peak of 700 people, Valier will need an additional 140 gallon-per-minute source of water based on a desirable design flow of 500 gallons-per-capita per day. The town should investigate the possibility of obtaining additional water rights to Lake Frances as the lake would supply a better quality water than wells.

Chester

Chester's population is expected to increase:

1972 Natural Population	Additional ABM Impact	1972 Peak Total
887	75	962

1/Kindergarten through 8th grade
2/High School

Chester continued

Schools

Although Chester will not need additional classrooms, the town will require an increased teaching staff.

K-8 1/	
Classrooms	Teachers
0	1

HS 2/	
Classrooms	Teachers
0	1

Utilities

Specific requirements and costs for Chester's required utilities are described in the Capital Improvements Targets and Strategic Plan and Appendix B.

Sewer

Chester has a 9-acre sewage lagoon which would have to be expanded to a total of at least 12-acres to handle the anticipated construction peak population. Although 10 acres would probably be adequate, there are certain economies of construction which can be realized by expanding to a larger capacity.

Solid Waste

The potential increase in population at Chester will seriously aggravate present solid waste problems. A bulldozer, site preparation, fencing, and other materials are needed to provide a sanitary land fill.

1/K-8 Kindergarten through 8th grade
2/High School

IMPLEMENTATION

STATE
REGIONAL
COUNTY
LOCAL

  Conrad
  Shelby
  Other Communities - Great Falls, Brady, Valier, Chester

OTHER

IMPLEMENTATION

The recommendations contained in this report require a concerted effort to become a reality. Although the Capital Improvements Program shows how the recommendations can be carried out, it does not set up governmental machinery for doing it. This process requires identifying existing legislation, recommending new implementational approaches and describing a system for continually monitoring the process.

The State of Montana has many planning statutes which can be used to provide adequate controls and implementation machinery. These were extensively revised in the 42nd Legislature through the enactment of HB 79 which amended many existing statutes and added some new provisions. Many of the recommendations for implementing the proposals contained in this report utilize provisions of HB 79 or other existing legislation. Special statutes are listed in Appendix F.

STATE LEVEL

Continuation of the State-coordinated policy approach will be the most valuable way to plan for the impact. The State, through the Department of Planning and Economic Development should be the vehicle of the recommended actions and responsible for updating and revising these recommendations to comply with any changes in military policy. The State should also be the coordinator for the contingency fund which is specified in the Strategic Plan and described in the section, Capital Improvements Targets and the Strategic Plan.

While the State can perhaps be most effective at the coordination level, there are several specific areas which would be appropriate for the State to administer. For example:

1. The State of Montana through the Governor's ABM Coordinating Committee should continue to support the impact communities. The ABM Coordinator and his staff should be retained in the State Department of Planning and Economic Development throughout the construction, installation, and operational checkout phases. Whenever possible, the planning staff of the Department of Planning and Economic Development should provide technical and advisory services to the jurisdiction concerned.

2. The State rather than the local counties may be in a better position to monitor the price and income effects caused by wage agreements and peak demand from outsiders attracted to new job opportunities in the area. The State could monitor incomes of existing residents on fixed incomes and the impact population relative to prices of selected commodities to understand the absolute and relative relationship of real income resulting from the impact. The only solution to these problems may depend on the cooperation of contractors and unions, the communities and the State. Public hearings may be a useful vehicle to inform the public of the causes, the effects and remedies to these problems.

STATE LEVEL continued

3. To the extent that there is unemployment in all six counties in the planning area, the construction and installation contractors as well as the unions should be encouraged to employ local qualified residents. Every local person employed lessens the population increase which, in turn, reduces added demand for housing, schools and other community services and utilities. And every local person employed decreases demand for unemployment and welfare funds. Although equal opportunity laws require the use of local labor where possible, contractors generally import union labor. However, precedent has been set by unions in other parts of the country for including local residents on construction jobs after an adequate but relatively short training period.

4. Another person should be added to both the State employment security and social and rehabilitative service staffs in Great Falls. In addition the field office in Conrad should be provided with more staff early in the ABM program. The influx of population and the uncertain duration that individual skills will be required will precipitate the need for statistics on employment, unemployment, earnings, migration, housing and public assistance.

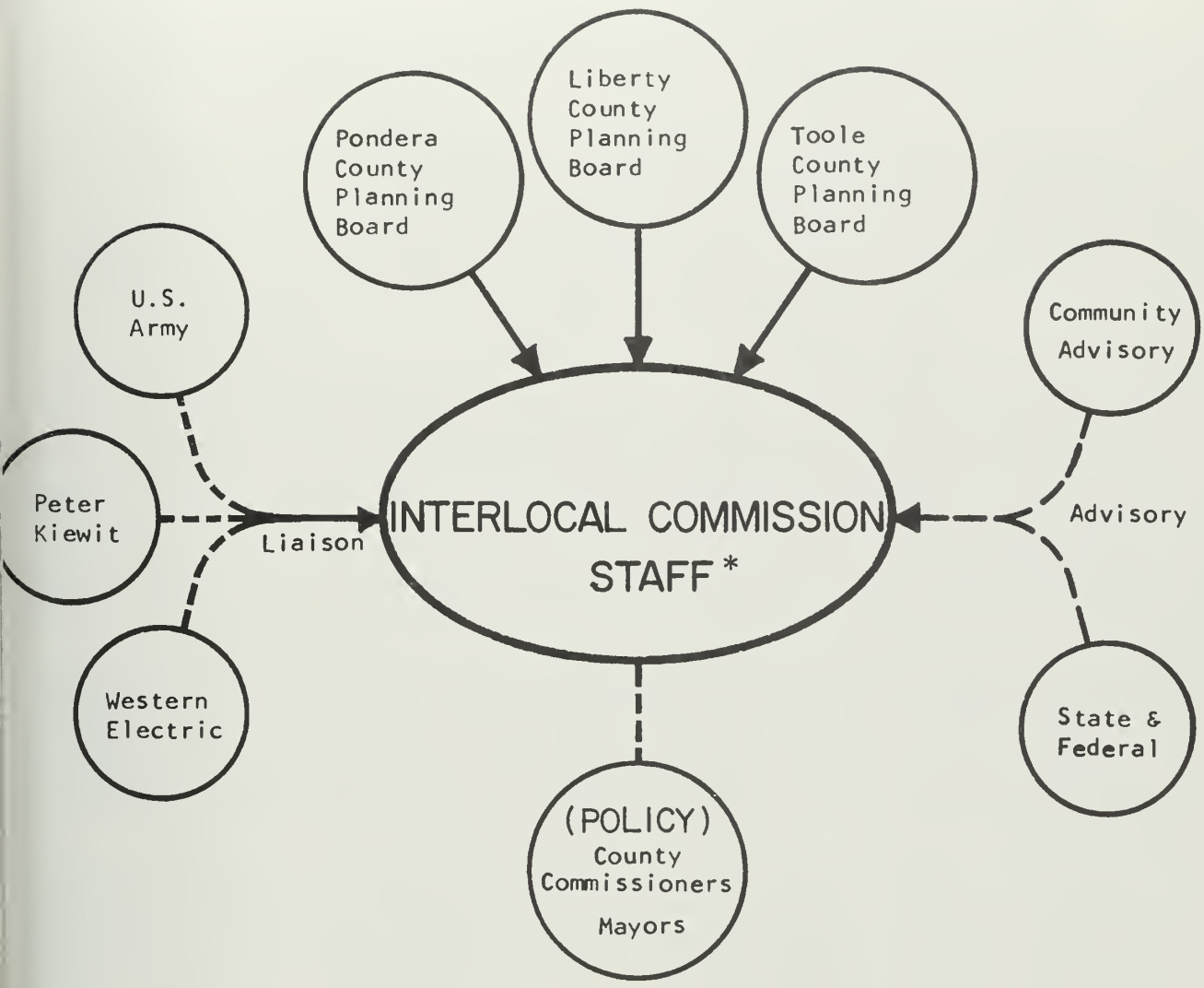
5. The recommendations of the Governor's Crime Control Commission should be implemented to increase law enforcement manpower commensurate with the population increase and to improve and augment current facilities and equipment.

6. The Governor's Manpower Planning Coordination Council should be kept apprised of and involved in manpower planning problems in the area.

REGIONAL OR INTERLOCAL LEVEL

An interlocal organization should be formed to coordinate the plans of the three counties most affected by the ABM project. This organization would consist of the County Planning Boards recommended for Pondera, Liberty, and Toole Counties. County Planning Board formation is discussed below in the section on County Level, Number 2. A director appointed by this agency and his staff would act as liaison and coordinator between the County Planning Boards and the Policy Group which would be comprised of elected officials - namely, county commissioners and mayors of major communities in the impact counties. This agency would be an Interlocal Cooperation Commission or closely modeled on such a commission as permitted by the Interlocal Cooperation Act of 1967, Revised Codes Montana 1947, Chapter 49, Title 16.

The basic organization of the porposed Interlocal Agency is shown on the following page.



* Including planning, social services, health, manpower, economic development, transportation, recreation.

PROPOSED INTERLOCAL AGENCY ORGANIZATION
FOR ABM PLANNING COORDINATION

REGIONAL OR INTERLOCAL LEVEL continued

An Interlocal Agency would provide technical assistance and coordinate the plans of all three counties with the ABM impact plans and actions of the State. Further, it would maintain liaison with the contractors, Peter Kiewit and Western Electric, and the military with regular summary progress reports and worker inventories. The agency would hold regular public meetings not only as informational sessions but also as a forum for local businessmen, residents, new workers in the area and special local and regional concerns regarding impact-generated problems.

The Interlocal Agency should begin to develop a regional plan for the six county impact area which emphasizes the three counties of Pondera, Toole and Liberty. This plan should include environmental concerns, transportation, housing, governmental services, recreation, considering all these elements on a regional scale as related to the demands that will be made by the operations phase personnel and families beginning in 1976.

An example of a special area of concern for this agency could be, for example, monitoring and alleviating potential local inflationary pressures induced by the ABM program. The purchasing power of present residents existing on fixed incomes could be hurt by price effects. Incoming worker and military populations may constitute a group whose wages, salaries, and contract agreements are such that their purchasing power will exceed that of current residents. Thus, compared to local residents, the new population may not be as severely affected by price rises. It is the new population whose demand for goods relative to income can cause extreme local inflation.

Not only may merchants and commerical groups constitute significant sources of credit, but regional and national banking services may be necessary to finance plant and inventory expansion as well as consumer credit. Price markups may reflect the unusual business expenditures and costs to expand plant and inventory as well as risk associated with the transitory nature of ABM and worker longer-run incomes in the area.

Taxation schemes are unprecedented, undesirable, and probably ineffective methods of combatting inflation in the six-county area. Rationing is not palatable. Prohibitive measures on investment and economic activity are equally undesirable. However, monitoring and setting wage and price guidelines are appropriate public policies to mitigate inflation, which will otherwise adversely affect local residents and merchants.

COUNTY LEVEL

1. The six planning area counties - Cascade, Chouteau, Liberty, Pondera, Teton, and Toole - should adopt all preceeding recommendations, where applicable, as amendments to Comprehensive Plans where such plans exist, or as County Policy.

COUNTY LEVEL continued

2. All planning area counties should form planning boards to improve communications and means of intergovernmental cooperation. Although the brunt of ABM impact will be centered in Conrad and Pondera County, its effects will be felt in all six counties. County Planning Boards are authorized under HB 79 which became effective in July 1971. Already three counties - Madison, Musselshell, and Broadwater - have established planning boards and others, notably Chouteau, are actively considering such action.

   When these County Planning Boards are formed, they should include major urban areas to avoid the confusion and duplication which would result from overlapping jurisdictions. Conrad, for example, has a City-County Planning Board with jurisdiction extending 4-1/2 miles into Pondera County. To eliminate complications, the current City-County Planning Board should be reorganized with the newly formed County Planning Board. One provision of HB 79 permits county planning boards to join with a city or cities in their jurisdictional area. Board members are appointed by the County Commission and the councils of any city represented. To support the planning function within counties and cities, HB 79 provides for graduated mill levies to be raised in the counties and cities on the basis of their class rating. This legislation is permissive, not mandatory, relegating the real power to enforce zoning to the counties and cities rather than to the State. A countywide planning organization would facilitate planning for unincorporated communities such as Brady and strengthen their position in obtaining federal grants through the auspices of the County Commission.

3. One of the first actions of the proposed County Planning Boards should be to create temporary interim zoning regulations and/or maps to guide and control development and discourage speculation. Legislation exists to create such emergency zoning for a one-year period pending the development of a master comprehensive plan for the jurisdictional area. This period may be extended by the county commissioners for an additional year.

   Another possible approach to planning and zoning in unincorporated areas would be through application of county planning and zoning districts authorized in Chapter 41 of Title 16, Revised Codes Montana 1947.

4. The proposed County Planning Boards should prepare County Master Plans or update existing plans to reflect changes forecast from ABM impact. These plans should set long-range goals and objectives to coordinate new growth and incorporate it systematically within a desired framework. Until now, the changes in land use in the six-county area have been relatively minor. But the change in emphasis from railroad to highway as the Interstate Highway system is developed is causing new

COUNTY LEVEL continued

patterns of urbanization. Moreover, the road developments brought about by the PAR and MSR site developments will be significant determinants of future land use. In deciding where development should and should not occur, expediency should not occur, expediency should not be the deciding factor in urbanizing agricultural land use.

5. The County Planning Boards should determine what federal programs are available and investigate their eligibility for these funds to implement their County Master Plans recommended programs. The Department of Planning and Economic Development provides assistance in applying for such programs.

6. Subdivision ordinances should be developed and enforced by county commissions and city councils which do not how have such ordinances, as required by SB 63, passed in the 42nd Legislature. SB 63 requires cities and counties to be responsible for developing and enforcing such regulations. To provide guidelines, the State of Montana Department of Planning and Economic Development is currently under contract to HUD to develop subdivision regulations for the counties and smaller cities. As these subdivision regulations become available, local communities should use them as a basis for developing their own subdivision regulations.

7. The Pondera and Toole County Planning Boards should each immediately develop and enforce Planned Unit Development Ordinances to set standards for the highest possible development of the new residential units recommended for Conrad and Shelby. The PUD is a zoning innovation which allows for maximum density control. Arbitrary lot restrictions are kept to a minimum to allow for maximum design freedom to provide a variety of housing and building types in one area. Single family homes can be combined with a variety of multifamily apartments. By clustering residential units, the open space saved from traditional lot requirements can be aggregated to provide open space, playgrounds and tot lots. Tax advantages may be realized from a PUD as it may be fiscally partitioned as a special tax district. Assuming that a PUD would be primarily occupied by impact population, this means that a significant part of the newcomers would be taxed for some of the services they require without increasing the taxes of existing residents. This is especially important for those of the community who live on fixed incomes.

8. Liberty County in cooperation with the State Fish and Game Authorities should immediately adopt recreation policies and regulations for handling the anticipated impact population surges in 1972 and 1973. The tight housing situation in Conrad and the national popularity of camper bus, trailer, and truck camping will undoubtedly lead many individuals and

COUNTY LEVEL continued

families who enjoy the outdoors and who want to avoid long commuter trips to work to camp out. The ABM demands added to the normal increase of summer season campers will probably keep camp sites occupied at full capacity. If demand for sites exceeds supply, people may overcrowd campsites or use undesignated areas. More rangers and sanitation personnel should be added to existing staffs for patrol and service to preserve open space areas from excessive use and potential irreparable damage. Wherever possible, new campsites should be developed to meet immediate demands. Once established, these sites should attract more tourist campers and accommodate recreational demands by a permanently increased population.

For the long-term, Liberty County, with the State Fish and Game authorities, should prepare a County Recreation Plan to determine the demands that will be made on the Tiber Dam and Recreation Area. Improving this area, regardless of ABM impact, would enhance the future position of Liberty County as a center of recreation in the north central region of Montana.

LOCAL LEVEL

Conrad

1. Conrad should continue in the process of planning for impact as presently forecast and to provide for future change. Special area studies and precise development plans compatible with the Comprehensive Plan should be undertaken to plan for housing, community facilities, the commercial area, and road improvements. Priorities would be established by those areas with the greatest potential for impact or with the most difficult existing problems.

2. Conrad should annex the unincorporated areas to the northwest and east of the community. New residential development there will depend on the city for services and facilities. Unless these areas are annexed, the city might be obligated to provide such services without having additional tax base for the community.

3. A traffic and parking study should be carried out by Conrad to prepare for the forecasted increase in population. In the commercial area especially, traffic is already congested and parking difficult. Traffic patterns will also be affected by the new Interstate Highway and these effects should be identified so that the impact can be planned for in advance.

Conrad continued

4. In those parts of the impact area subject to flooding, flood plain regulations should be observed. These regulations, as set forth in HB 265, 42nd Legislature, 1971 require local political subdivisions to adopt land use regulations which meet or exceed the minimum standards of the Montana Water Resources Board. Conrad should review the land use element of its Comprehensive Plan as it relates to Pondera Coulee in the context of the Water Resources Board standards.

5. Existing building codes should be reviewed and updated if necessary to comply with latest standards so that Conrad will be better qualified for available federal funds and to ensure a high standard of quality for new development.

6. Additional staff personnel will be required to handle increased administrative workloads particularly building inspections, planning and public works. Sanitary service personnel should be added as required by new, expanded services. Additional teaching staff will also be required as specified in The Strategic Plan: Community-By-Community Projects, Appendix B.

Shelby

1. The City of Shelby should adopt the recommendations, where applicable, as amendments to its comprehensive plan.

2. Shelby should review and, if necessary, update its building code to comply with latest standards so that it will be better qualified for available federal funds.

Other Communities - Great Falls, Brady, Valier and Chester

1. Although Great Falls will be able to accommodate the peak population spillovers with its present level of services and facilities, the city should recognize that unexpected problems can occur and that funds are available in the Contingency Fund ($350,000) to alleviate unexpected effects of the ABM program.

2. The communities of Brady, Chester, and Valier should adopt these recommendations, where applicable, as amendments to comprehensive plans, where such plans exist, or as official policy.

3. In these communities, existing building codes should be reviewed and updated if necessary to comply with latest standards so they will be better qualified for available federal funds.

OTHER

1. Continuing public participation throughout the entire process should be encouraged to give local residents a part in helping to shape the changes that will occur in the area. Specifically, a citizen participation process should be established which would schedule regular meetings, organize study groups, and provide a continuing stream of information, perhaps via a periodic newsletter.

2. Phasing or staged development will assure that necessities are completed as required, that development does not precede demand, and provide flexibility to meet changing circumstances that may occur.

3. Individual businesses and groups of business organizations locally may benefit from assistance in the form of low interest loans for the expansions that are expected. Significant benefits could be achieved by investigating and searching out such sources of funding.

4. A local development corporation can often most effectively implement major changes in accordance with precise plans and stated goals for specific areas. A local development corporation would be an innovative way to implement the proposed Planned Unit Development Ordinance (PUD) to provide the housing required by ABM personnel.

   Such groups may be profit, non-profit, or cooperative. They may be formed, for example, by any one of or combination of local landowners, investment companies, labor unions, insurance companies, or other large institutions. A development corporation would have the advantage of being able to assemble and purchase the necessary parcels, develop them for residential use, and lease or sell to each successive personnel influx. An organization diagram of such a development corporation is shown in Appendix D.

CAPITAL IMPROVEMENTS TARGETS AND STRATEGIC PLAN

Specific recommendations for project assistance to communities affected by the ABM project are shown in the Strategic Plan on the following table. These recommendations are for capital improvements expenditures and four-year (1972-1976) operating, maintenance, and salary expense in these communities. The recommendations for target levels of service are based on the expected and planned distribution of impact population.

These projects and costs are expected to be financed principally by Federal assistance. Department of Defense funds are available to finance total development or to match other Federal assistance programs, such as those in the general areas of administration, health services, sewer - water - solid waste, and education. Some of these programs are listed in Appendix C - Key Legislation and Funding Sources.

The Strategic Plan was prepared knowing that some of the impact has already occurred and that some services have been budgeted. It is a set of recommendations for the additional assistance that will be needed to add to funds already received from the Department of Defense and other agencies to provide target levels of services for the expected impact population. Funds from other agencies and groups are available to help with the construction or operating and maintenance expenses associated with the capital improvements projects.

A contingency fund should be maintained by the Department of Defense. As shown on the Strategic Plan under AA Priority in the amount of $350,000.00, this fund would be set aside for community impacts that are neither anticipated nor planned. In the short-term ... 1972 - 1973 ... about two-thirds of the ABM population will descend on Great Falls. Although the need for added public facilities and residences is not anticipated, there will be an increase in the demands for services requiring additional public administration, employment, welfare, and teaching personnel. Whereas study recommendations have been formulated to encourage long-range, long-term concentration in Conrad, the pattern which actually evolves could be of a different nature and produce unplanned impact problems. Private development decisions could produce an unexpected level of impact in Cut Bank, Choteau, Sunburst, or Dutton. Thus, additional funds should be available for unexpected problems in other communities. This fund should be coordinated by State and interlocal agencies in the same manner as previous impact funds.

Because apparent needs exceed available funds, the program will have to follow priorities set by the recommendations. The first step is to define the program, then define the methods to finance it. Then a schedule can be devised on a project-by-project basis. Until now, assistance funds have been dispensed through the guidance of the governor's Coordinating Commission.

CAPITAL IMPROVEMENTS TARGETS AND STRATEGIC PLAN

CAPITAL IMPROVEMENTS TARGETS AND STRATEGIC PLAN continued

Priorities have been established to achieve the desired development in the six-county impact area and specific communities. The recommendations are intended to provide development which appears to be most viable and which support the State's objective of achieving a certain standard or quality of life for its residents. These priorities, as shown in the Strategic Plan on the following page, are:

AAA A priori condition

AA Discretionary a priori condition
(local and regional evaluation of desirability of spending in otherwise questionable areas)

A Necessary and complementary condition to desirable development

B Desirable development if discretionary

C Low priority to desirable development since not complementary to concentration

STRATEGIC PLAN:
TARGET LEVELS, ASSISTANCE RECEIVED, AND STRATEGIC GAP REMAINING (APRIL, 1972)
FOR CAPITAL IMPROVEMENTS AND FOUR-YEAR OPERATING, MAINTENANCE, AND SALARY EXPENSE[2]
FOR PROJECTS IN COMMUNITIES, SIX-COUNTY AREA, MONTANA, 1972 - 1976
STACKED BY PRIORITY
(THOUSAND 1972 DOLLARS)

REF.[1] CODE	Community	Project	Additional Assistance Required: Capital Improvements Gap	Additional Assistance Required: Salaries, Operating & Maintenance Gap[2]	Strategic Gap
AAA Priority (Precondition for Recommendations):					
15	Conrad	Sewer	0	51	51
16	Conrad	Water & Waste	0	50	50
25	Shelby	Sewer	0	17	17
26	Shelby	Water	0	17	17
55	Chester	Sewer	25	8	33
56	Chester	Water & Waste	50	9	59
65	Great Falls	Sewer	0	9	9
66	Great Falls	Water & Waste	0	8	8
73A	Regional	Inter-Local	15	145	160
73B	Regional & State	Services excluding Law[3] [4]	50	108	79
73C	Other Regional	Law Enforcement [5]	0	0	0
AA Priority (Precondition for Recommendations, but discretionary consideration to costs)					
35	Brady [6]	Sewer	10	8	18
36	Brady [6]	Water & Waste	237	9	246
45	Valier [6]	Sewer	0	9	9
46	Valier [6]	Water	115	8	123
73A	Regional	Contingency Fund	350 [7]	0	350
A Priority (Very High Priority to Compliment Preconditions)					
14	Conrad	Health Services	226	318	544
24	Shelby	Health Services	75	88	163
54	Chester	Health Services	25	34	59
74	Regional	Health Services	0	68	68
11	Conrad	Elementary School	0	430	430
12	Conrad	High School	0	232	232
21	Shelby	Elementary & Junior High School	0	108	108
22	Shelby	High School	0	63	63
51	Chester	Elementary School	0	33	33
52	Chester	High School	0	17	17
13	Conrad	Administration & Public Services	360	410	770 [8]
23	Shelby	Administration & Public Services	208	223	431
B Priorities (High Priority to Compliment Preconditions, some with consideration of AA Priority above)					
	Brady	Elementary Schools	60	34	94
32	Brady	High Schools	100	17	117
41	Valier	Elementary Schools	30	34	64
42	Valier	High Schools	50	17	67
	Great Falls	Elementary & Junion High Schools	0	101	101
62	Great Falls	High Schools	0	47	47
33	Brady	Administration & Public Services	0	34	34
43	Valier	Administration & Public Services	0	34	34
53	Chester	Administration & Public Services	50	60	110
63	Great Falls	Administration & Public Services	0	86	86
C Low Priorities (Competitive with/or of Little Contribution to Recommendation)					
77A	Regional	Highway FAS 457	1,020	0	1,020
77B	Regional	Highway FAS 225	3,400	0	3,400
77C	Regional	Airport	531	0	531
77D	Regional	Conrad Airport	317	0	317
77E	Regional	Shelby Airport	364	0	364

Footnotes on following page

Footnotes

1. The Reference Code consists of two numbers. The first number refers to the location - a specific community or region. The second number refers to the type of project. Thus, Project #15 is for Conrad Sewer and may be found by referring to Appendix B Tables for each community and region.

First Number - Location Code	Second Number - Project Code
1. Conrad	1. Elementary school & Junior High Schoo
2. Shelby	2. High School
3. Brady	3. Administrative and Public Services
4. Valier	4. Health Services
5. Chester	5. Sewer
6. Great Falls	6. Water
7. Regional	7. Transportation

2. Salaries/operating & maintenance expense is the sum total for the 4-year period 1972 - 1976. It takes into account relative levels of activity in each of the 4 years and incorporates a price increase at 5% per year. The expenditure stream was then discounted at 8% per annum back to the present.

3. Regional/State services and grants exclusive of law enforcement are $78,531.00. This amount is comprised of:

Public Sanitarian	$ 38,640.00
Planning Grant	14,891.00
Resource Developmnent Grant	25,000.00
	$ 78,531.00

4. Excludes $60,000 from U.S. Department of Interior for the Lake Frances Project, Water and Land Conservation effort.

5. Law Enforcement is a part of "administrative and public services." The following funds received from Safeguard are regional rather than local in nature. (Conrad has already received a local law enforcement grant of $8,669.00):

Pondera County Sheriff	$ 35,112.00
Toole County Sheriff	27,536.00
Regional Education & Training	6,666.00
County Gp Home (Pondera & Toole Counties)	2,760.00
9th Judicial Probation District	698.00
Total from Safeguard	$ 72,772.00
OSA & CD Mobile Radio Grant	10,318.00
LEAA Grant	255,375.00
Total Grants	$338,465.00

Footnotes continued

The LEAA law enforcement grant of $255,375 is not deducted in the table above since it was recently received and exceeded the $51,600 gap recommended for Pondera. Of note is the fact that administrative recommendations in the table are only partly reduced by the substantial grants shown here because the category, administrative, takes into account other services. Since requests of $165,063 were initially made for specific law enforcement budget, only a few of the items are applicable and directly related to entries made above.

6. The recommendations for Brady and Valier sewer and water improvements are discretionary because of the prohibitive expense required to bring the systems up to standards for the population level they could expect. Brady and Valier may attract some impact population. But, compared to Conrad and, to a lesser degree, Shelby, improvements should be made only if needed rather than as an inducement to development.

7. Lump Sum

8. Discrepancy in total due to assistance funds already granted to Police Department ($8,669.00).

APPENDICES

		Page
A.	WORKERS, POPULATION, HOUSING AND SCHOOL FORECASTS	56
	1. Workers Employed - ABM, I-15, and Support	60
	2. New Population Resulting Directly and Indirectly from ABM and I-15 Construction	61
	3. New Households by Type and Year Resulting from ABM and I-15 Impact Population	62
	4. School-Age Children Associated with New Impact Population	63
B.	THE STRATEGIC PLAN: COMMUNITY-BY-COMMUNITY PROJECTS	64
	B.1 Target Levels of Service	65
	B.2 Strategic Gap	66
	B.3 Strategic Plan: Target Levels, Assistance Received and Strategic Gap for Capital Improvements and Operating, Maintenance, and Salary Expense	67
	Conrad	70
	Shelby	73
	Brady	77
	Valier	80
	Chester	83
	Great Falls	86
	Regional	89
C.	KEY LEGISLATION AND FUNDING	92
	Administration	93
	Medical	101
	Sewer-Water-Waste	103
	Schools	106
D.	DEVELOPMENT CORPORATION ORGANIZATION	110
E.	BASIS FOR RECOMMENDATIONS	113
	1. Objectives	113
	2. Preliminary Concepts	115
	3. Simulation and Policy Strategies	117
F.	LEGISLATIVE REFERENCES	125

APPENDIX A - WORKERS, POPULATION, HOUSING, AND SCHOOL FORECASTS

Appendices A.1 through A.4 forecast, for the six-county impact area from the 1st quarter 1972 to the end of 1976, the number of workers, new population, new households and school-age children.

WORKERS

In Appendix A.1, the category of primary workers includes all construction and installation workers and the small, but significant, number of Interstate Highway I-15 construction workers who are in the area now and who will be moving northwards during the next few years. Excluded from this category are construction workers required to build non-military housing and facilities for the impact population.

NEW POPULATION

In Appendix A.2, New Population Resulting Directly and Indirectly from ABM and I-15 Construction, is developed from figures of expected employment shown in Appendix A.1. Total impact population forecasts were derived from primary and military employment forecasts on the assumption of certain demographic characteristics, namely:

- at least 60 percent of the ABM workers must come from outside the area
- 70 percent of new workers are married with the mix of married worker households including an average of 3.4 persons
- 15 support workers will be needed to service 100 primary workers[1/]

1/The ratio of 15 support workers per 100 primary workers reflects the current demographic characteristics of the State of Montana. In the period 1962-1970 the State's primary worker population (excluding government) increased from about 63.5 thousand to about 81.7 thousand while supportive worker population increased from about 41.5 thousand to 45.9 thousand. Thus, the ratio of support to primary workers actually decreased from about .66 to .56. Viewed from another perspective, while 18.3 thousand primary jobs were created over the period, supportive responded by approximately only 4.4 thousands or 24 new supportive for every 100 primary. This excludes the increasing sector of government workers which would lower the ratio. The ratio of 15 rather than 24 supportive workers per 100 primary workers used in this report reflects more transient conditions and the existing supportive plant as new workers enter the area.

APPENDIX A continued

In Appendix A.2, minor discrepancies between figures indicated in Total Impact Population and the sum total of the columns, Worker Population, Military Population, and Support Population are the result of roundings in the calculations. The ratio of military barrack population to total military population is about 15/1000 on the basis of data received from the Montana State Department of Planning and Economic Development. The ratio of military on-base purchases to total military family purchases is 1/2.

HOUSEHOLDS

Single workers or military barracks populations are distinguished from married households in the assumptions because the single men are expected to live in institutional dormitories or transient quarters. A household size is one. Each single worker or person is counted as "head of household." Thus, an institution which counts as 1 dwelling unit may accommodate many "households."

Several assumptions were made about military, workers, and support households which are analogous with typical transient construction populations.

Workers

The household size mix characteristics of the married worker households is assumed to be:

25% of the households - 2 persons - 1 husband, 1 wife
30% of the households - 3 persons - 1 husband, 1 wife, 1 child
30% of the households - 4 persons - 1 husband, 1 wife, 2 children
10% of the households - 5 persons - 1 husband, 1 wife, 3 children
5% of the households - 6 persons - 1 husband, 1 wife, 4 children
Insignificant percent households - over 6 persons.

On the basis of this distribution, the average size of the married worker household is about 3.4 persons. This differs from the average size of the married military households described below owing to a relatively lower size for a more transient worker population compared with a relatively larger size for a more permanent population.

APPENDIX A continued

Military

The following assumptions are for non-barrack military households. (See above assumptions for the separation of barrack population from total military population.)

5% of the households - 2 military persons sharing a household (BOQ) (non-barracks)
10% of the households - 2 persons - 1 husband, 1 wife
25% of the households - 3 persons - 1 husband, 1 wife, 1 child
40% of the households - 4 persons - 1 husband, 1 wife, 2 children
15% of the households - 5 persons - 1 husband, 1 wife, 3 children
5% of the households - 6 persons - 1 husband, 1 wife, 4 children
Insignificant percent households - over 6 persons

As a result, average non-barrack household size is 3.7. This conversion factor coincides with forecasts prepared by the State of Montana Department of Plannirg and Economic Development.

CHILDREN

The number of children forecast represents the sum of all married households - military, primary workers, and secondary workers .

It is assumed that there are an even number of children in each age category from age 1 through 18 so that the percentages of children ages 1 - 18 would fall in the following age ranges:

25% pre-school
50% kindergarten through 8th grade
25% high school

Since the median age of the married worker head of the household is probably fairly young, there may be relatively more children in younger age groups than in the more permanent households. Further, because many of the construction workers are so transient, the children in his household that do arrive in the area with him are apt to be younger. Older children might tend to be involved in other activities away from their families.

APPENDIX A continued

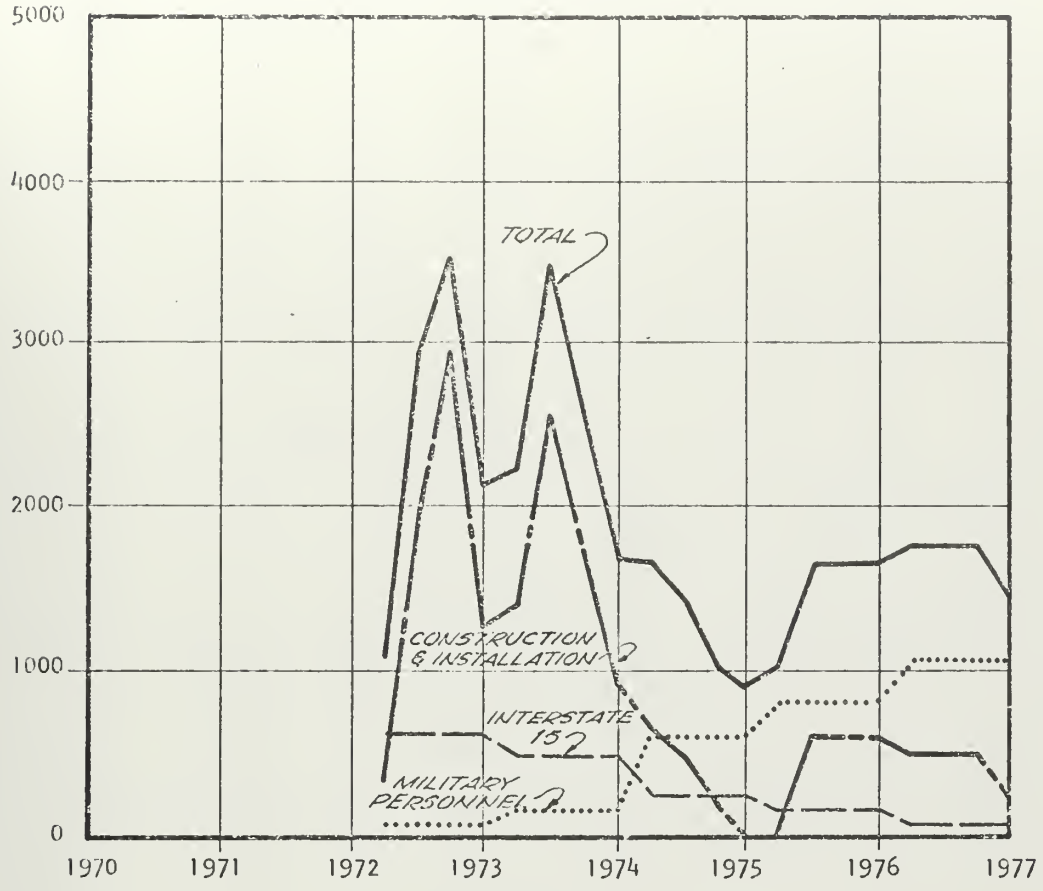
AVERAGE ANNUAL GROWTH RATE

In forecasting total population for the impact area and specific communities, an average annual growth rate was included. Recent trends over time period B (1960 - 1970) were used except where it appeared that longer trend period - period A (1950 - 1970) would exclude unusual recent trends.

	ANNUAL COMPOUNDING FACTOR	AVERAGE ANNUAL GROWTH RATE
Conrad	1.0231	2.31 % A/
Shelby	1.0009	- .0009 % A/
Brady	.9895	- 1.05 % B/
Valier	.9957	- .43 % B/
Chester	.9789	- 2.11 % B/
Great Falls	1.0084	.84 % B/

A/1950 - 1970 Trend
B/1960 - 1970 Trend

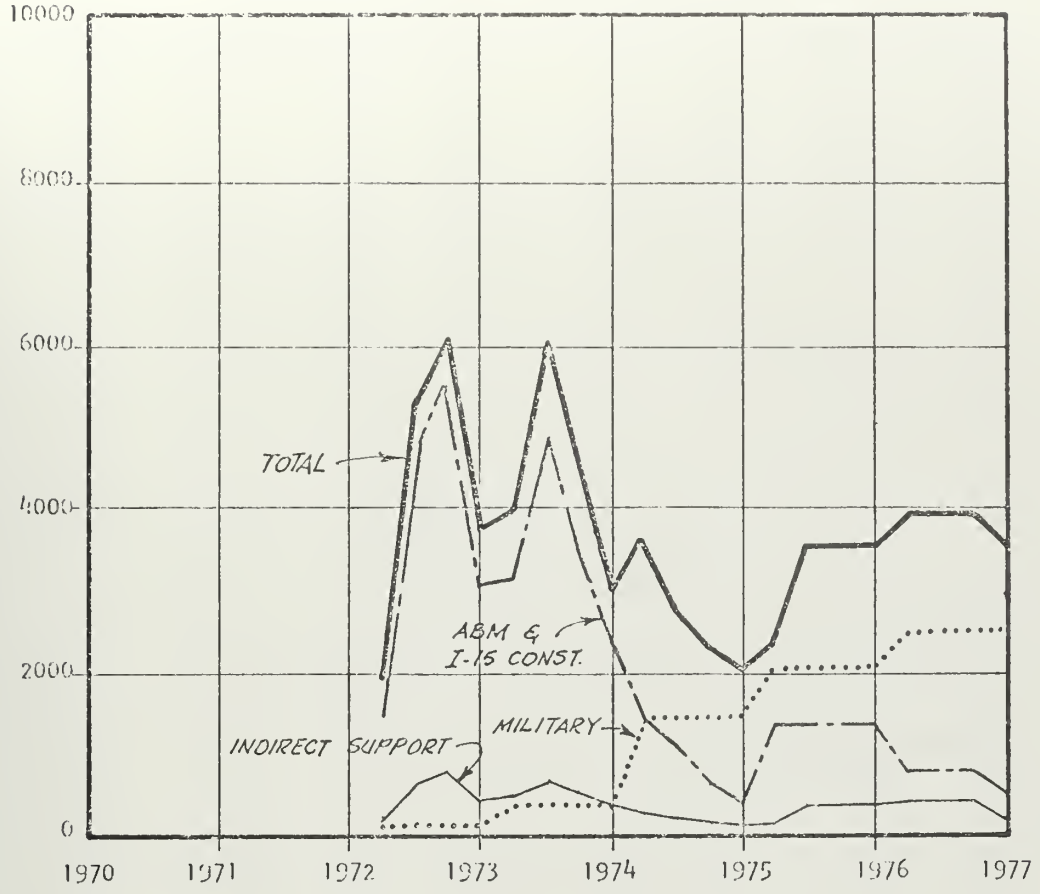
WORKERS EMPLOYED - ABM, I-15 AND SUPPORT
SIX-COUNTY AREA, MONTANA 1970-77



WORKERS EMPLOYED

Year	Qtr.	Total	Construction	Installation	I-15 Road Construction	Support	Military	Primary Workers
1972	1	1090	323	0	620	89	58	943
	2	2928	2009	0	620	240	58	2629
	3	3956	2952	0	620	325	58	3572
	4	2132	1279	0	620	175	58	1899
1973	1	2232	1406	0	500	181	144	1906
	2	3485	2555	0	500	285	144	3055
	3	2574	1720	0	500	210	144	2220
	4	1698	916	0	500	137	144	1416
1974	1	1657	683	0	245	126	602	928
	2	1424	470	0	245	107	602	715
	3	1112	183	0	245	81	602	428
	4	912	0	0	245	65	602	245
1975	1	1022	0	0	150	70	801	150
	2	1676	0	600	150	124	801	750
	3	1676	0	600	150	124	801	750
	4	1676	0	600	150	124	801	750
1976	1	1752	0	500	50	126	1075	550
	2	1752	0	500	50	126	1075	550
	3	1752	0	500	50	126	1075	550
	4	1479	0	250	50	103	1075	300

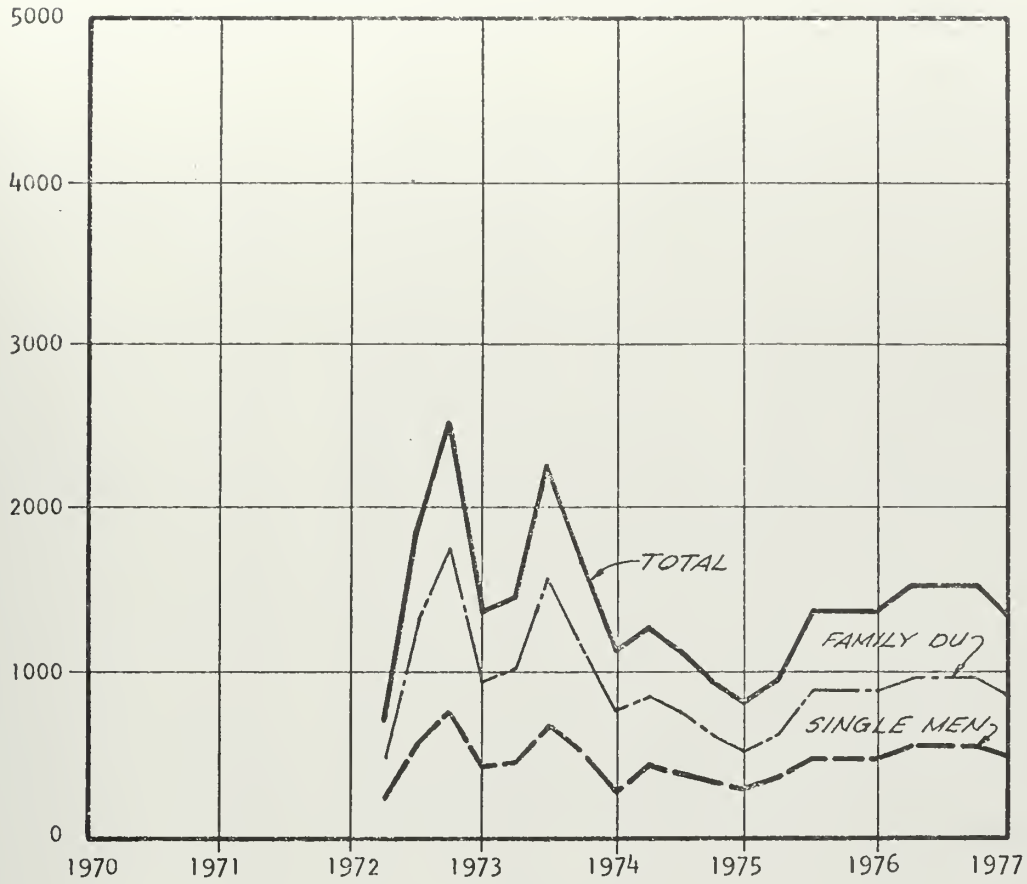
NEW POPULATION
RESULTING DIRECTLY AND INDIRECTLY
FROM ABM & I-15 CONSTRUCTION



TOTAL IMPACT POPULATION
SHOWING NUMBERS OF NEW IMPACT SUPPORT AND MILITARY PEOPLE
SIX COUNTY AREA, MONTANA 1971-1976

Year	Qtr.	Total Impact Population	Worker Impact Population	Military Impact Population	Support Impact Population
1972	1	1,905	1,516	150	238
	2	5,022	4,227	150	645
	3	6,766	5,743	150	872
	4	3,672	3,053	150	469
1973	1	3,922	3,064	370	487
	2	6,047	4,912	370	764
	3	4,502	3,569	370	563
	4	3,016	2,276	370	369
1974	1	3,371	1,492	1,540	339
	2	2,977	1,149	1,540	287
	3	2,446	688	1,540	218
	4	2,108	393	1,540	174
1975	1	2,481	241	2,050	189
	2	3,590	1,205	2,050	334
	3	3,590	1,205	2,050	334
	4	3,590	1,205	2,050	334
1976	1	3,973	884	2,750	338
	2	3,973	884	2,750	338
	3	3,973	884	2,750	338
	4	3,511	482	2,750	278

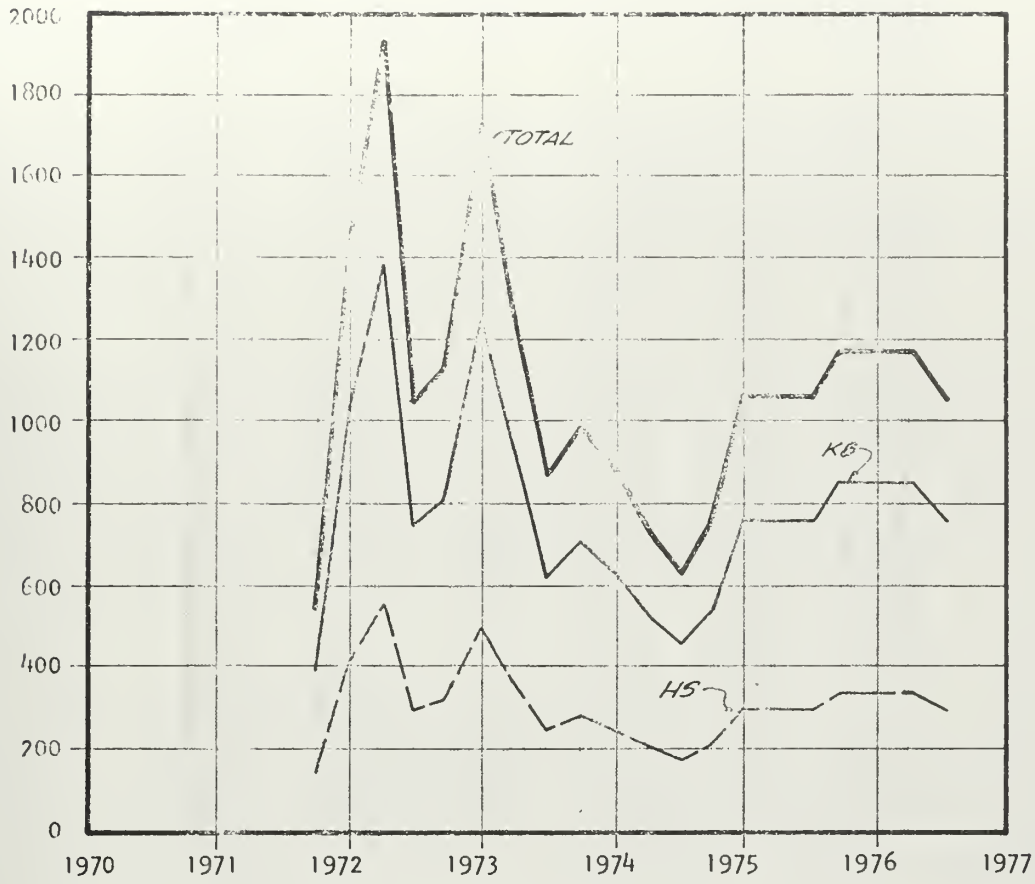
HOUSEHOLDS FOR NEW WORKERS BY HOUSEHOLD TYPE



NEW HOUSEHOLDS

Year	Qtr.	Total Households	Single Households	Married Households
1972	1	713	218	494
	2	1876	567	1308
	3	2527	763	1764
	4	1373	416	956
1973	1	1470	453	1017
	2	2263	690	1572
	3	1686	518	1168
	4	1132	351	780
1974	1	1285	436	849
	2	1138	391	746
	3	940	332	608
	4	814	294	519
1975	1	962	355	607
	2	1376	479	896
	3	1376	479	896
	4	1376	479	896
1976	1	1532	549	982
	2	1532	549	982
	3	1532	549	982
	4	1359	497	862

AVERAGE SCHOOL-AGE CHILDREN ASSOCIATED WITH NEW IMPACT POPULATION BY YEAR AND QUARTER, SIX-COUNTY AREA, 1972-76



SCHOOL CAPACITY

Year	Qtr.	Total Children	K-8 Children	HS Children
1972	1	544	390	154
	2	1432	1025	407
	3	1928	1380	548
	4	1047	750	297
1973	1	1123	804	319
	2	1728	1237	491
	3	1288	922	366
	4	864	619	245
1974	1	899	709	279
	2	875	628	247
	3	724	520	204
	4	627	451	176
1975	1	744	535	209
	2	1059	761	298
	3	1059	761	298
	4	1059	761	298
1976	1	1181	849	332
	2	1181	849	332
	3	1181	849	332
	4	1050	755	295

APPENDIX B - THE STRATEGIC PLAN: COMMUNITY-BY-COMMUNITY PROJECTS

Table B.1 shows the recommended target levels of service. Table B.2 shows the additional assistance required or the "Strategic Gap" that presently exists (April 1972) between the recommended level of assistance and assistance already extended. Table B.3 gives a detailed description of the Strategic Gap, Assistance Received, and Target Levels for two categories - Capital Improvements and Operating and Maintenance Expenses for the four-year period 1972 - 1976.

Following Tables B.1, B.2, B.3 are the summaries of projects for individual communities. These are presented to support the figures which appear in Table B.3 by Type of Expenditure and summarized in Table B.1 as Total Target Levels of Service. Projects are summarized for Conrad, Shelby, Brady, Valier, Chester, Great Falls, and the Six-County Impact Region. The priorities shown on the community project tables are described in the Section, Capital Improvements Targets and Strategic Plan. In brief, they are:

AAA	A priori condition
AA	Discretionary a priori condition (local and regional evaluation of desirability of spending in otherwise questionable areas)
A	Necessary and complementary condition to desirable development
B	Desirable development if discretionary condition fulfilled
C	Low priority to desirable development since not complementary to concentration

TABLE B.1

TARGET LEVELS OF SERVICE
TO PROVIDE PUBLIC CAPITAL IMPROVEMENTS, AND FOUR-YEAR OPERATING, MAINTENANCE, AND SALARY EXPENSE[1/]
FOR PROJECTS AND COMMUNITIES, SIX COUNTY AREA, MONTANA, 1972-76[2/]
(1972 DOLLARS)

ty	Elementary School & JHS	High School	Admin. & Public Serv.	Health Services	Sewer	Water & Waste	*Total* Level by Community
	$1,361,000	$ 845,000	$ 770,000 [8/]	$ 568,000	$355,000	$ 863,000	$4,762,000
	220,000	126,000	431,000	163,000	17,000	17,000	974,000
/]	128,000	134,000	34,000	0	18,000 [6/]	226,000 [6/]	540,000
6/]	98,000	84,000	34,000	0	9,000 [6/]	123,000 [6/]	348,000
	68,000	34,000	110,000	59,000	33,000	34,000	338,000
alls	202,000	94,000	86,000	0	9,000	8,000	399,000
l	0	0	158,000	68,000	0	0	226,000
	$2,077,000	$1,317,000	$1,623,000	$ 858,000	$441,000	$1,271,000	$7,587,000

Regional Contingency Fund	350,000
Regional Inter-Local	160,000
Regional/State Supportive Services [3/] [4/]	158,000
Regional Law Enforcement [5/]	338,500
Regional Roads	1,450,000
Total	$10,043,500

otes follow Table B.3

TABLE B.2

STRATEGIC PLAN:
SHOWING TOTAL STRATEGIC GAP (APRIL, 1972)
FOR CAPITAL IMPROVEMENTS AND FOUR-YEAR OPERATING MAINTENANCE, AND SALARY EXPENSE
FOR PROJECTS IN COMMUNITIES, SIX COUNTY AREA, MONTANA, 1972-76[2]
(1972 DOLLARS)

Elementary School & JHS	High School	Admin. & Public Serv.	Health Services	Sewer	Water & Waste,	*Total* Level by Community
$429,975	$232,850	$ 761,331	$544,000	$ 51,000	$ 50,000	$2,069,156
108,221	63,000	431,000	163,000	17,000	17,000	799,221
94,000	117,000	34,000	0	18,000[6]	246,000[6]	509,000
64,000	67,000	34,000	0	9,000[6]	123,000[6]	297,000
32,961	17,000	110,000	59,000	33,000	59,000	310,961
101,000	47,000	86,000	0	9,000	8,000	251,000
0	0	239,469	68,000	0	0	307,469
$830,157	$543,850	$1,695,800	$834,000	$137,000	$503,000	$4,543,807

Regional Contingency Fund	350,000
Regional Inter-Local [3]	160,000
Regional/State Supportive [4] [5]	79,500
Total	$5,133,307

tes follow Table B.3

TABLE B.3

STRATEGIC PLAN:

SHOWING TARGET LEVELS, ASSISTANCE RECEIVED, AND STRATEGIC GAP REMAINING (APRIL, 1972) FOR CAPITAL IMPROVEMENTS AND FOUR-YEAR OPERATING, MAINTENANCE, AND SALARY EXPENSE FOR PROJECTS IN COMMUNITIES, SIX COUNTY AREA, MONTANA, 1972-76[2/]
(1972 DOLLARS)

REF.[1/] CODE	Community	Project	Strategic Gap (April, 1972) *TOTALS*	Strategic Gap (April, 1972) Capital Improvement	Strategic Gap (April, 1972) Operating & Maintenance	Target Service Levels Capital Improvement	Target Service Levels Operating & Maintenance	Assistance (up to April, 1972) Capital Improvement	Assistance (up to April, 1972) Operating & Maintenance
11	Conrad	K-8 School	$429,975	$ 0	$429,975	$481,000	$880,000	$481,440	$450,025
21	Shelby	K-6 & JHS	108,221	0	108,221	0	220,000	0	111,779
31	Brady [6/]	K-8 School	94,000	60,000	34,000	60,000	68,000	0	34,000
41	Valier [6/]	K-8 School	64,000	30,000	34,000	30,000	68,000	0	34,000
51	Chester	K-8 School	32,961	0	32,961	0	68,000	0	35,039
61	Great Falls	K-6 & JHS	101,000	0	101,000	0	202,000	0	101,000
71	Regional	K-8 School	0	0	0	0	0	0	0
12	Conrad	High School	232,850	400	232,450	371,000	474,000	370,600	241,550
22	Shelby	High School	63,000	0	63,000	0	126,000	0	63,000
32	Brady [6/]	High School	117,000	100,000	17,000	100,000	34,000	0	17,000
42	Valier [6/]	High School	67,000	50,000	17,000	50,000	34,000	0	17,000
52	Chester	High School	17,000	0	17,000	0	34,000	0	17,000
62	Great Falls	High School	47,000	0	47,000	0	94,000	0	47,000
72	Regional	High School	0	0	0	0	0	0	0
13	Conrad [8/]	Admin. & Pub. Serv.	761,331 [8/]	360,000	410,000	360,000	410,000	8,669 [8/]	0
23	Shelby	Admin. & Pub. Serv.	431,000	308,000	223,000	208,000	223,000	0	0
33	Brady	Admin. & Pub. Serv.	34,000	0	34,000	0	34,000	0	0
43	Valier	Admin. & Pub. Serv.	34,000	0	34,000	0	34,000	0	0
53	Chester	Admin. & Pub. Serv.	110,000	50,000	60,000	50,000	60,000	0	0
63	Great Falls	Admin. & Pub. Serv.	86,000	0	86,000	0	86,000	0	0
14	Conrad	Health Services	544,000	226,000	318,000	250,000	318,000	24,000	0
24	Shelby	Health Services	163,000	75,000	88,000	75,000	88,000	0	0
34	Brady [6/]	Health Services	0	0	0	0	0	0	0
44	Valier [6/]	Health Services	0	0	0	0	0	0	0
54	Chester	Health Services	59,000	25,000	34,000	25,000	34,000	0	0
64	Great Falls	Health Services	0	0	0	0	0	0	0
74	Regional	Health Services	68,000	0	68,000	0	68,000	0	0
15	Conrad	Sewer	51,000	0	51,000	304,000	51,000	336,250	0
25	Shelby	Sewer	17,000 [6/]	0	17,000	0	17,000	0	0
35	Brady [6/]	Sewer	18,000 [6/]	10,000	8,000	10,000	8,000	0	0
45	Valier [4/] [6/]	Sewer	9,000	0	9,000	0	9,000	0	0
55	Chester	Sewer	33,000	25,000	8,000	25,000	8,000	0	0
65	Great Falls	Sewer	9,000	0	9,000	0	9,000	0	0
16	Conrad	Water & Waste	50,000	0	50,000	813,000	50,000	816,668	0
26	Shelby	Water & Waste	17,000	0	17,000	0	17,000	0	0
36	Brady [6/]	Water & Waste	246,000 [6/]	237,000	9,000	217,000	9,000	0	0
46	Valier [4/] [6/]	Water & Waste	123,000 [6/]	115,000	8,000	115,000	8,000	0	0
56	Chester	Water & Waste	59,000	50,000	9,000	25,000	9,000	0	0
66	Great Falls	Water & Waste	8,000	0	8,000	0	8,000	0	0
73A	Regional	Contingency Fund	350,000	350,000	0	350,000	0	0	0
73A	Regional	Inter Local [8/] [3/] [4/]	160,000	15,000	145,000	15,000	145,000	0	0
73B	Reg./State	Supportive Services	79,469	50,000	108,000	50,000	108,000	78,531	0
73C	Reg. Other	Law Enforcement [5/] [8/]	-	-	-	-	-	-	-

Footnotes follow Table B.3

Footnotes

1. The Reference Code consists of two numbers. The first number refers to the location - a specific community or region. The second number refers to the type of project. Thus, Project #15 is for Conrad Sewer and may be found by referring to Appendix B Tables for each community and region.

First Number - Location Code	Second Number - Project Code
1. Conrad	1. Elementary school & Junior High Schoo.
2. Shelby	2. High School
3. Brady	3. Administrative and Public Services
4. Valier	4. Health Services
5. Chester	5. Sewer
6. Great Falls	6. Water
7. Regional	7. Transportation

2. Salaries/operating & maintenance expense is the sum total for the 4-year period 1972 - 1976. It takes into account relative levels of activity in each of the 4 years and incorporates a price increase at 5% per year. The expenditure stream was then discounted at 8% per annum back to the present.

3. Regional/State services and grants exclusive of law enforcement are $78,531.00. This amount is comprised of:

Public Sanitarian	$ 38,640.00
Planning Grant	14,891.00
Resource Developmnent Grant	25,000.00
	$ 78,531.00

4. Excludes $60,000 from U.S. Department of Interior for the Lake Frances Project, Water and Land Conservation effort.

5. Law Enforcement is a part of "administrative and public services." The following funds received from Safeguard are regional rather than local in nature. (Conrad has already received a local law enforcement grant of $8,669.00):

Pondera County Sheriff	$ 35,112.00
Toole County Sheriff	27,536.00
Regional Education & Training	6,666.00
County Gp Home (Pondera & Toole Counties)	2,760.00
9th Judicial Probation District	698.00
Total from Safeguard	$ 72,772.00
OSA & CD Mobile Radio Grant	10,318.00
LEAA Grant	255,375.00
Total Grants	$338,465.00

Footnotes continued

The LEAA law enforcement grant of $255,375 is not deducted in the table above since it was recently received and exceeded the $51,600 gap recommended for Pondera. Of note is the fact that administrative recommendations in the table are only partly reduced by the substantial grants shown here because the category, administrative, takes into account other services. Since requests of $165,063 were initially made for specific law enforcement budget, only a few of the items are applicable and directly related to entries made above.

6. The recommendations for Brady and Valier sewer and water improvements are discretionary because of the prohibitive expense required to bring the systems up to standards for the population level they could expect. Brady and Valier may attract some impact population. But, compared to Conrad and, to a lesser degree, Shelby, improvements should be made only if needed rather than as an inducement to development.

7. Lump Sum

8. Discrepancy in total due to assistance funds already granted to Police Department ($8,669.00).

	K TO 8[b] SCHOOLS[c] (PRIORITY A)
12	Classrooms[d]
12	Teachers[d]
1	Multilevel or support personnel[d]
*	Misc. equipment for 390 new students[d]

REF. CODE[a]	HIGH SCHOOLS[c] (PRIORITY A)
12	6+ Classrooms[d]
	6 Teachers[d]
	1 Multilevel or support personnel[d]
	* Misc. equipment for 150 new students[d]

REF. CODE[a]	ADMINISTRATIVE AND PUBLIC SERVICES[e] (PRIORITY A)
13	* Public joint use building ($200,000)
	1 Garage for new public services autos
	1 Garage addition for new fire truck
	* Public Park ($115,000)
	2 Police cars[f]
	1 Public services car
	1 Fire truck ($40,000)
	4 Equivalent positions local police-fire-civil defense & judicial[f]
	2 Equivalent positions local planning, building department, water, sewer, roads
	2 Equivalent positions local administrative, finance
	2 Equivalent positions local cultural, amenity, health and other
	* Miscellaneous equipment for 10 public services employees
	* Misc. special equipment for police & fire depts.

: See page 3 of 3 of "Conrad Projects"

HEALTH (PRIORITY A)	REF.[a] CODE	SEWER (PRIORITY AAA)	REF.[a] CODE	WATER & WASTE (PRIORITY AAA)
20-bed addition - divert 20 bed users to another facility	15	(boost capacity to 7,500, excess of 7,200 based on incremental cost)	16	12" Water main loop in NW Area (boost capacity to 7,200)
1 New M.D.		16" Sewer interceptor in NW loop		1 mg. Ground water tank
1 Part-time M.D.[g]		* Lagoon expansion		12" Transmission line to Lake Frances Intake
11 Paramedical, hospital support & clerical workers		* Misc. operating & maint. costs		* Misc. fencing & equipment for waste management
1 Ambulance				* Misc. operating & maint. costs

See page 3 of 3 of "Conrad Projects"

TRANSPORTATION (PRIORITY C)

* Conrad Airport ($317,000) (Land acquisition and reconstruction of runway & taxiway

* Traffic, surface street & parking

NOTES

a/ Reference Code - Capital Improvements/ Strategic Plan Project Numbers

b/ K-8 - Kindergarden through eighth grade

c/ Additional funds might be needed for bus transportation, library, cultural amenities, special facilities, playground and recreational equipment, and other facilities. These funds might come from the Contingency Fund or from other special funds provided by federal and state agencies. Refer to Appendix C for possible funding sources.

d/ A change in assumptions for the basis of demographic composition of households indicates the need for additional classrooms for Conrad. Because this change was made as the final report was being prepared, these additions are not shown in this table. The implication is to increase the target levels of service and the strategic gap to cover the following services:

ELEMENTARY & JUNIOR HIGH SCHOOLS			HIGH SCHOOLS		
Impact Students	Classrooms	Teachers	Impact Students	Classrooms	Teachers
500	13	13	200	13	13

e/ If the recommendations are followed and a large percent of the impact population lives in a Planned Unit Development or Special Improvement Area, then some of the amenities and parks may be proviced as a private development cost. The City of Conrad would not be obligated then to provide the otherwise recommended recreational level of assistance. Funds may be needed, however, to obtain books, records, periodicals, and other materials provided by urban libraries depending on the demands made by the new impact population. Many of these people who are well-traveled and well-educated may make new demands which can best be met on a regional level with a floating loan collection from Great Falls.

f/ These recommendations should be reduced. As this final report was being prepared, some assistance was granted in the areas of Law Enforcement, administrative, and ambulance. Refer to Footnotes 5 and 8 in the Strategic Plan Table of the Section, Capital Improvements Targets and Strategic Plan. -

g/ A regional M.D. would be assigned part time to several communities as demand required.

* Indicates that quantity required is not a standard unit of measurement and may require discretionary consideration per capita and/or total amounts.

K TO 6[b] SCHOOLS[c] (PRIORITY A)	REF.[a] CODE	JUNIOR HIGH SCHOOL[c] (PRIORITY A)	REF.[a] CODE	HIGH SCHOOL[c] (PRIORITY A)
0 Classrooms[d]	21B	0 Classrooms[d]	22	1 Teacher[d]
3 Teachers[d]		1 Teacher[d]		1 Multilevel teacher or support personnel[d]
* Misc. equipment for 100 new students[d]		* Misc. equipment for approx. 30 new students[d]		* Misc. equipment for 30 new students[d]

: See page 4 of 4 of "Shelby Projects"

PROJECTS - continued - Page 2 of 4

ADMINISTRATIVE AND PUBLIC SERVICES[e] (PRIORITY A)	REF.[a] CODE	HEALTH SERVICES (PRIORITY A)	REF.[a] CODE	SEWER (PRIORITY AAA)
* New police building on E of town to free up other public facilities ($156,000)	24	3-bed addition to hospital or equivalent plant addition	25	* Misc. additional operating and maintenance expenditures
* Public park ($52,000)		1 Part-time M.D.[f]		
1 Police car		4 Paramedical, hospital support & clerical workers		
1 Public services car				
1 Equivalent position local police-civil defense-judicial				
1 Equivalent position local planning/building, water, sewer, roads				
11 Equivalent position administrative, finance				
* Misc. equipment for 3 public services employees				

See page 4 of 4 of "Shelby Projects"

PROJECTS - continued - Page 3 of 4

WATER & WASTE (PRIORITY AAA)	REF. a/ CODE	TRANSPORTATION (PRIORITY C)
* Misc. additional operating & maintenance expenditures	27	* Shelby Airport * Surface streets

See page 4 of 4 of "Shelby Projects"

eference Code - Capital Improvements/Strategic Plan Project Numbers

indergarden through 6th grade

dditional funds might be needed for bus transportation, library, ultural amenities, special facilities, playground and recrea- ional equipment, and other facilities. These funds might come rom the Contingency Fund or from other special funds provided by ederal and state agencies. Refer to Appendix C for possible unding sources.

change in assumptions for the basis of demographic composition of ouseholds indicates the need for additional classrooms for Shelby. ecause this change was made as the final report was being prepared, hese additions are not shown in this table. The implication is to ncrease the target levels of service and the strategic gap to cover he following services:

ELEMENTARY & JUNIOR HIGH SCHOOLS			HIGH SCHOOLS		
Impact Students	Classrooms	Teachers	Impact Students	Classrooms	Teachers
206	7	7	56	4	4

dditional funds may be needed to obtain books, records, periodicals, nd other materials generally provided by urban libraries depending n the demands made by the new impact population. Some of these emands may best be met on a regional level with a floating loan ollection from Great Falls.

regional M.D. would be assigned part time to several communities s demand required.

ndicates that quantity required is not a standard unit of measure- ent and may require discretionary consideration per capita and/or otal amounts.

D Y P R O J E C T S - Page 1 of 3

K TO 8[b] SCHOOLS (PRIORITY B)	REF.[a] CODE	HIGH SCHOOL (PRIORITY B)	REF.[a] CODE	PUBLIC SERVICES	REF. CODE	HEALTH SERVICES
1 New classroom	32	1 New classroom	33	Not applicable	34	Not applicable
1 Equivalent teacher/support		1 Equivalent teacher/support				
* Misc. equipment for 30 students		* Misc. equipment for 10 students				

Extreme discretion should be given to developing at Brady in order to attract significant impact. Operating at its current level of municipal services, the town is not equipped to absorb many additional people. The need for necessary improvements, particularly a water treatment plant (Item #36) would make it extremely expensive to accommodate a major population increase. Its proximity to both the PAR and MSR sites will attract some population. But, the new population should be encouraged to concentrate at Conrad and Shelby rather than in Brady. As a result, targets should be well below those which are recommended with discretion.

: See page 3 of 3 of "Brady Projects"

PROJECTS - continued - Page 2 of 3

SEWER (PRIORITY AA)	REF.[a] CODE	WATER & WASTE (PRIORITY AA)	REF.[a] CODE	TRANSPORTATION
* Misc. operating expenses[c] and maintenance expense	36	1 mg covered steel reservoir	37	Not applicable
		* water treatment plant		
		* Misc. operating expense and maintenance expense		

: See page 3 of 3 of "Brady Projects"

S

Reference Code - Project Numbers for Capital Improvements/Strategic Plan

Kindergarden through eighth grade

Services will have to be provided from Conrad, the County Seat, as Brady s not incorporated and relies on county improvement districts for these services.

Use (1) Conrad, (2) Great Falls facilities

ndicates that quantity required is not a standard unit of measurement nd may require discretionary consideration per capita and/or total mount.

I E R P R O J E C T S - Page 1 of 3

K to 8[b] SCHOOLS (PRIORITY B)	REF.[a] CODE	HIGH SCHOOL (PRIORITY B)	REF.[a] CODE	PUBLIC SERVICES[c] (PRIORITY B)
1 Additional classroom	42	1 Additional classroom	43	* Misc. operating & Maintenance
1 Equivalent teacher/support		1 Equivalent teacher/support		
* Misc. equipment for 30 students		* Misc. equipment for 10 students		

See page 3 of 3 of "Valier Projects"

R PROJECTS - continued - Page 2 of 3

/HEALTH SERVICES	REF.[a/] CODE	SEWER (PRIORITY AA)	REF.[a/] CODE	WATER & WASTE (PRIORITY AA)	REF.[a/] CODE	TRANS-PORTATION
Not applicable	45	* Misc. operating & Maintenance	46	1+ Additional wells 1 .15 mg elevated storage tank * Misc. operating & maintenance	47	Not applicable

: See page 3 of 3 of "Valier Projects"

eference Code - Capital Improvements/Strategic Plan Project Numbers

-8 - Kindergarden through eighth grade

ervices provided by the county but provided by additional operating and
aintenance

se (1) Conrad, (2) Great Falls facilities.

uantity required is not a standard unit of measurement and may require
iscretionary consideration concerning per capita and/or total amounts.

STER PROJECTS - Page 1 of 3

K TO 8[b] SCHOOLS (PRIORITY A)	REF.[a] CODE	HIGH SCHOOLS (PRIORITY A)	REF.[a] CODE	ADMINISTRATIVE AND PUBLIC SERVICES (PRIORITY B)
1 Additional classroom	52	1 Additional Classroom	53	* Build or lease space for County-City organization
1 Equivalent teacher/support		1 Equivalent teacher/support		1 Police car
* Misc. equipment for 30 new students		* Misc. equipment for 10 new students		1 Public services car
				1 Equivalent position police-fire-civil defense
				1 Equivalent position building/planning/ administrative
				* Misc. equipment for 2 employees
				* Misc. additional police equipment

: See page 3 of 3 of "Chester Projects"

ER PROJECTS - continued - Page 2 of 3

HEALTH SERVICES (PRIORITY A)	REF. CODE [a]	SEWER (PRIORITY AAA)	REF. CODE [a]	WATER & WASTE (PRIORITY AAA)
1+ Bed expansion at hospital or equivalent addition to plant	55	* Lagoon expansion	56	* Misc. operating & maintenance expense
1 Equivalent paramedical, hospital support & clerical worker		* Misc. operating & maintenance expense		

: See page 3 of 3 of "Valier Projects"

TER PROJECTS - continued - Page 3 of 3

S

Reference Code - Capital Improvements/Strategic Plan Project Numbers

Kindergarden through eighth grade

Indicates that quantity required is not a standard unit of measure-
ment and may require discretionary consideration concerning per
capita and/or total amounts.

AT FALLS PROJECTS - Page 1 of 3

K TO 6[b] SCHOOLS (PRIORITY B)	REF.[a] CODE	JUNIOR HIGH SCHOOLS[c] (PRIORITY B)	REF.[a] CODE	HIGH SCHOOLS[c] (PRIORITY B)
0 Classrooms[d]	61B	0 Classrooms[d]	62	0 Classrooms[d]
2 Equivalent teacher/support[d]		1 Equivalent teacher/support[d]		1 Equivalent teacher/support[d]
* Misc. equipment for 60 new students[d]		* Misc. equipment for 30 new students[d]		* Misc. equipment for 30 new students[d]

See page 3 of 3 of "Great Falls Projects"

FALLS PROJECTS - continued - Page 2 of 3

ADMINISTRATIVE AND PUBLIC SERVICES (PRIORITY B)	REF. CODE [a/]	HEALTH SERVICES	REF. CODE [a/]	SEWER (PRIORITY AAA)	REF. CODE [a/]	WATER & WASTE (PRIORITY AAA)
1 Equivalent position, police	64	Not applicable	65	* Misc. operating & maintenance expense	66	* Misc. operating & maintenance expense
1 Equivalent position building/planning & financial administrator						
1 Equivalent position, cultural, amenity, health, welfare						
1 Car (compensate)						
* Misc. equipment for 4 additional public service employees						

: See page 3 of 3 of "Great Falls Projects"

TRANSPORTATION

Not applicable

NOTES

a/ Reference Code - Capital Improvements/Strategic Plan Project Numbers

b/ Kindergarden through 6th grade

c/ Additional funds might be needed for bus transportation, library, cultural amenities, special facilities, playground and recreational equipment, and other facilities. These funds might come from the Contingency Fund or from other special funds provided by federal and state agencies. Refer to Appendix C for possible funding sources.

d/ A change in assumptions for the basis of demographic composition of households indicates the need for additional teachers at Great Falls. The City should have enough classrooms to absorb the additional children. Because this change was made as the final report was being prepared, these additions are not shown in the Great Falls Projects Table. At this point (April, 1972) it is impossible to specify how many more teachers will be needed. The forecasted spillover impact of more than 4,300 people is expected to occur in Great Falls during the summer of 1972 when schools are not in session. In the last quarter of the year the impact drops to around 2,800. But, because of the extremely temporary nature of the construction jobs, it is hard to predict how many workers' families will return to their own home communities once the school year begins again. Thus, teachers will have to be hired on a contingency basis.

* Indicates that quantity required is not a standard unit of measurement and may require discretionary consideration concerning per capita and/or total amounts.

I O N A L P R O J E C T S - Page 1 of 3

K TO 8 SCHOOLS[b] (PRIORITY A)[c]	REF.[a] CODE	HIGH SCHOOLS & ADULT & HIGHER EDUCATION (PRIORITY A[c])	REF.[a] CODE	ADMINISTRATIVE AND PUBLIC SERVICES (PRIORITY B)
* Misc. cultural services	72	* Misc. cultural services	73A[d]	Contingency Fund ($350,000 discretionary emergency assistance)
			73A[d]	Regional and Inter-local (Pondera, Liberty, Toole) (Priority AAA)
				* Rent or acquire space for 4 years[e]
				1 Car
				* Misc. equipment for 3 employees
				* Additional funds for publication & distribution, communications
				1 Director
				1 Assistant
				1 Secretary/clerk
			73B	Other regional support at State Level (Priority A)
				1 Regional sanitarian
				1 Regional resources agent
				1 Regional recreation - fish & game agent
			73C	Other[f] (Pondera County) (Priority A)
				2 Cars for sheriff
				2 Equivalent positions for sheriff's department
				* Misc. equipment

: See page 3 of 3 of "Regional Projects"

F.[a] DE	HEALTH SERVICES (PRIORITY A)
4	1 M.D. assigned to communities in a 3-county area

REF.[a] CODE	TRANSPORTATION (PRIORITY C)
77	* Regional airport * Paving FAS #225 north from Cascade-Chouteau County Line to FAS #457 * Paving FAS #457 between the PAR site and FAS #225

es: See page 3 of 3 of "Regional Projects"

REGIONAL PROJECTS - continued - Page 3 of 3

NOTES

a/ Reference Code - Capital Improvements/Strategic Plan Project Numbers

b/ Kindergarden through 8th grade

c/ Additional funds might be needed for bus transportation, library, cultural amenities, special facilities, playground and recreational equipment, and other facilities. These funds might come from the Contingency Fund or from other special funds provided by federal and state agencies. Refer to Appendix C for possible funding sources.

d/ 73A is split into two parts - one is the Interlocal organization discussed at length in the Section, Implementation, Regional or Interlocal Level. The other part is the Contingency Fund which would be coordinated by State and interlocal agencies in the same manner as previous impact funds. This fund would be maintained by the Department of Defense and would be set aside for community impacts that are neither anticipated nor planned. Although the recommendations call for impact concentration at Conrad and Shelby, private development decisions could produce an unexpected level of impact in Cut Bank, Choteau, Sunburst, or Dutton. The Contingency Fund would provide additional finances for unexpected problems in communities.

e/ Possible consideration for lawyer, outside consultant

f/ These recommendations should be reduced. As this final report was being prepared, some assistance was granted in the areas of Law Enforcement, administrative, and ambulance. Refer to Footnotes 5 & 8 in the Strategic Plan Table of the Section Capital Improvements Target and Strategic Plan.

* Indicates that quantity required is not a standard unit of measurement and may require discretionary consideration per capita and/or total amounts.

APPENDIX C - KEY LEGISLATION AND FUNDING

Financing the capital improvement recommendations as well as the related operating and maintenance expense items in the ABM impact area was considered as coming principally from federal assistance. Department of Defense funds are available to finance the development in total or to match other federal assistance programs. The general areas of administration, medical, and sewer-water-solid waste, and schools are all eligible for other federal assistance programs in addition to DOD funds. On the following pages these four areas are listed with the federal agencies whose funds could be utilized to accomplish the objectives within each area. Any ABM impact federal assistance requested by a city or a county must also be approved by the state agency involved as coordinators between the federal government and the municipality. In addition, state agencies can often provide technical assistance and guidelines to the cities and counties or planning areas directly. Although there is little state funding assistance available, there are situation where it can be obtained.

These federal assistance programs are listed by title, federal agency, authorization, objectives, type of assistance, uses, applicant eligibility, and assistance considerations. This is not an all-inclusive listing. There are other federal programs through which assistance could be obtained both in terms of a direct grant and others where loans or training can be obtained.

ADMINISTRATION

The administrative area deals with such items as law enforcement, parks and recreation, public facilities and planning.

1. Title
Economic Development Grants and Loans for Public Works and Development Facilities

Federal Agency
Economic Development Administration, Department of Commerce

Authorization
Public Works and Economic Development Act of 1965
Public Laws 89-136, 90-103, 91-123 and 91-304

Objectives
To assist in the construction of public facilities needed to encourage long-term economic growth

Type of Assistance
Project grants and direct loans

Uses
Water and sewer systems, access roads to industrial parks, public tourism facilities, vocational schools, flood control projects

Applicant Eligibility
Local sub-divisions of the states are eligible

Assistance Considerations
Grants may be made up to 50 percent of the project costs and designated redevelopment areas up to 80 percent.

2. Title
Economic Development - Planning Assistance

Federal Agency
Economic Development Administration, Department of Commerce

Authorization
Public Works and Economic Development Act of 1965
Public Laws 89-136, 90-102, 91-125 and 91-304

Objectives
To develop multi-county district planning capabilities

Type of Assistance
Project grants

Uses
Planning staff salaries and administrative expenses of the economic development organization

Applicant Eligibility
Area determined by the Secretary of Commerce to have substantial need for the planning systems

Assistance Considerations
A maximum of 75 percent federal sources

3. Title
Construction of Public Libraries

Federal Agency
Office of Education, Department of Health, Education and Welfare

Authorization
Library services and Construction Act,
Public Laws 89-511 and 90154

Objectives
Authorize grants to states for the construction of public libraries to serve areas without facilities necessary to develop their own library services

Type of Assistance
Formula grants

Uses
Building construction, building additions, alterations, renovations, acquisition of existing building, acquisition of land and initial equipment in such buildings.

Applicant Eligibility
State Library Extension Agency

Assistance Considerations
Federal share ranges from 33 to 66 percent

4. Title
Juvenile Delinquency Planning, Prevention and Rehabilitation

Federal Agency
Social and Rehabilitative Services, Department of Health, Education and Welfare

Authorization
Juvenile Delinquency Prevention and Control Act of 1968 Public Law 90-445

Objectives
To help communities prepare comprehensive treatment and preventive services for delinquent youths, and to develop community alternatives to incarceration of youths.

Type of Assistance
Project grants

Uses
Emphasis is on preventive, community-based services to youth

Applicant Eligibility
County and municipal agencies

Assistance Considerations
Planning federal share may not exeed 90 percent, preventive federal share may not exceed 75 percent and rehabilitative federal share may not exceed 60 percent

5. Title
Comprehensive Planning Assistance (701)

Federal Agency
Community Planning and Management Department, Department of Housing, and Urban Development

ADMINISTRATION continued

Authorization
The Housing Act of 1954, Section 701, Public Law 83-560

Objectives
To strengthen the decision-making capabilities of local government, and thereby promote more effective use of resources.

Type of Assistance
Project grants

Uses
Broad range of subjects including patterns of land use, provision of public services, and the effective development of resources.

Applicant Eligibility
Areawide planning agencies, counties or cities

Assistance Considerations
Normally, 66 percent of the cost

6. Title
Urban Systems Engineering Demonstration of Grants

Federal Agency
Community Planning and Management Department, Department of Housing and Urban Development

Authorization
Housing Act of 1964, Section 701

Objectives
Assist public bodies developing optimum public service systems on an areawide basis

Type of Assistance
Project grants

Uses
To finance the application of systems analysis such as design, construction and operation costs, land acquisition and land use.

Applicant Eligibility
Areawide planning agencies, counties or cities

ADMINISTRATION continued

Assistance Considerations
Generally 66 percent of the net project costs

7. Title
Neighborhood Facilities Grants

Federal Agency
Community Development, Department of Housing and Urban Development

Authorization
Housing and Urban Development Act of 1965, Section 703, Public Law 89-117

Objectives
To provide funds to aid in the construction or rehabilitation of community service centers.

Type of Assistance
Project grants

Uses
Construction, acquisition, expansion or rehabilitation of existing structures to be used as multipurpose neighborhood centers.

Applicant Eligibility
Local public bodies or agencies

Assistance Considerations
66 percent of the development costs

8. Title
Open Space Land Programs

Federal Agency
Community Development, Department of Housing and Urban Development

Authorization
Title 4 of the Housing and Urban Development Act of 1970, Public Law 91-609

Objectives
To assist communities in meeting the rapidly growing recreation needs of urban areas by assisting them in acquiring and developing land.

Type of Assistance
Project grants

Uses
Acquiring land, demolition of inappropriate structures; constructing roadways; landscaping; installing public utilities, recreational facilities, swimming pools; structure improvement.

Applicant Eligibility
Local public bodies

Assistance Considerations
Not more than 50 percent of the total cost of acquisition and development.

9. Title
Outdoor Recreation Acquisition and Development

Federal Agency
Bureau of Outdoor Recreation, Department of Interior

Authorization
Land and Water Conservation Fund Act of 1965, Public Laws 88-578, 90-401, 91-485 and 91-308.

Objectives
To provide financial assistance for the acquisition and development of outdoor recreation areas and facilities for the general public to meet current and future needs.

Type of Assistance
Project grants

Uses
Acquisition and development of picnic areas, intracity parks, campgrounds, tennis courts, boat ramps, bike trails, swimming pools and support facilities.

ADMINISTRATION continued

Applicant Eligibility
The state agency designated by the governor to administer the state's land and water conservation fund program.

Assistance Considerations
Not more than 50 percent of the project may be federally financed.

10. Title
Law Enforcement Assistance - Discretionary grants

Federal Agency
Law Enforcement Assistance Administration

Authorization
Ominbus Crime Control and Safe Street Act of 1968, Public Laws 90-351 and 91-644

Objectives
Probation and parole improvement, police and court improvement.

Type of Assistance
Project grants

Applicant Eligibility
State or local units of government

Assistance Considerations
75 percent federal except for construction projects where the limit is 50 percent.

11. Title
Airport Development Aid Program

Federal Agency
Federal Aviation Administration, Department of Transportation

Authorization
Airport and Airway Development Act of 1970, Public Law 91-258

ADMINISTRATION continued

Objectives
To assist public agencies in the development of a nationwide system of public airports

Type of Assistance
Project grants

Uses
Land acquisition, site preparation, construction of runways, taxiways, aprons and roads

Applicant Eligibility
Counties or municipal public agencies if their airport requirements are shown in a national airport systems plan

Assistance Considerations
Usually 50 percent federally funded

12. Title
Airport Planning Grant Program

Federal Agency
Federal Aviation Administration, Department of Transportation

Authorization
Airport and Airway Development Act of 1970, Public Law 91-258

Objectives
To assist public and planning agencies in the planning of a nationwide system of public airports.

Type of Assistance
Project grants

Uses
Development of airport master palns and development of airport systems plans

Applicant Eligibility
County, municipal and other public agencies if their airport is shown in a national airport systems plan

Assistance Considerations
66 percent of the cost for airport master plans and systems plans

MEDICAL

Federal assistance for medical and hospital purposes is available in addition to any assistance that might be forthcoming through the Department of Defense.

1. Title
Comprehensive Health Plan -- Areawide Grants

Federal Agency
Health Service and Mental Health Agency,
Department of Health, Education and Welfare

Authorization
Public Health Service Act, Title 3,
Public Laws 89-749, 90-174, 91-296 and 91-515

Objectives
To provide financial support for areawide comprehensive health planning

Type of Assistance
Project grants

Uses
Grant funds to be used for areawide, comprehensive health planning purposes. Money may not be used to provide or administer health services.

Applicant Eligibility
Any public agency or private non-profit organization concerned with health.

Assistance Considerations
Federal share will not normally exceed 50 percent of the costs

2. Title
Health Facilities Construction - Grant
(Hill-Burton Program)

Federal Agency
Health Services and Mental Health Administration,
Department of Health, Education and Welfare

Authorization
Public Health Service Act, Title 6,
Public Law 88-443 and 91-296

MEDICAL continued

Objectives
To assist states in planning and providing hospital, public health centers, outpatient facilities, emergency rooms, extended care facilities and rehabilitation facilities.

Type of Assistance
Project grants

Uses
May be used for the new construction or replacement of facilities and expansion or remodeling of existing facilities and equipment necessary for the construction project or new service. Assistance is not available for the purchase of the land except for public health centers.

Applicant Eligibility
Local government hospitals, district or private, nonprofit organizations.

Assistance Considerations
The federal share is based on a formula but can be up to 66 percent of the total cost.

3. Title
Health Service Development

Federal Agency
Health Service and Mental Health Agency, Department of Health, Education and Welfare

Authorization
Public Service Act, Title 3, Public Laws 89-749, 90-174 and 91-515

Objectives
To support a full range of public health services to meet special needs at the community level.

Type of Assistance
Project grants

MEDICAL continued

Uses
The project grants must involve one or more of the following:

The measure to be employed (a) have not been applied beyond the development state, (b) have not been applied in the location and (c) will be extended to serve a population not now being served.

Applicant Eligibility
Any public or nonprofit private agency

Assistance Considerations
No specific matching requirements, however, applicant must assume part of the project costs

SEWER-WATER-SOLID WASTE

1. Title
Comprehensive Areawide Water and Sewer Planning Grants

Federal Agency
Farmers Home Administration,
Department of Agriculture

Authorization
Consolidated Farmers Home Administration Act of 1961

Objectives
To promote efficient and orderly development of rural communities and the water and sewer facilities

Type of Assistance
Project grants

Uses
To provide technical and professional service and to cover necessary costs of test wells and soil and cost investigations.

Applicant Eligibility
Public bodies such as counties and cities and local planning commissions

SEWER-WATER-SOLID WASTE continued

Assistance Considerations
Grant assistance may be for the entire cost of the plan.

2. Title
Water and Waste Disposal System for Rural Communities

Federal Agency
Farmers Home Administration, Department of Agriculture

Authorization
Consolidated Farmers Home Administration Act of 1961

Objectives
To provide basic human amenities, alleviate the health adversities and promote orderly growth of rural areas.

Type of Assistance
Project grants and direct loans

Uses
Funds may be used for the installation, repair, improvement or expansion of rural water systems or rural waste disposal systems

Applicant Eligibility
Public or quasi-public bodies not operating for profit

Assistance Considerations
Grant assistance is limited to 50 percent of the project cost

3. Title
Basic Water and Sewer Facilities

Federal Agency
Community Development, Department of Housing and Urban Development

Authorization
Housing and Urban Development Act of 1965, Section 702, Public Law 89-117

Objectives
To provide grants to construct water and sewer facilities

SEWER-WATER-SOLID WASTE continued

Type of Assistance
Project grants

Uses
Project includes facilities to store, supply, treat, purify or distribute water, sanitary sewer system and storm sewer systems

Applicant Eligibility
Cities, towns and counties

Assistance Considerations
Program grants generally are not to exceed 50 percent of appraisal; under special circumstances communities with populations of less than 10,000 are eligible for 90 percent grant assistance.

4. Title
Solid Waste Plan Grants

Federal Agency
Office of Environmental Protection Agency

Authorization
Solid Waste Disposal Act of 1965, Public Laws 89-272 and 91-512

Objectives
To assist municipal agencies in the development of plans and programs leading to the solution of solid waste management problem.

Type of Assistance
Project grants

Uses
Survey of solid waste disposal practices, developing and revising solid waste disposal plans, providng for recycling of recoverable materials from waste, planning programs for removal of abandoned motor vehicles.

Applicant Eligibility
Municipal or inter-municipal agencies composed of public officials

SEWER-WATER-SOLID WASTE continued

Assistance Considerations
66 2/3 percent of the cost for a single municipality and 75 percent of the cost for multi-municipalities. Grantee's share must come from a non-federal source.

5. Title
Construction Grant for Waste Water Treatment Works

Federal Agency
Water Quality Office of the Environmental Protection Agency

Authorization
Federal Water Policy Control Act, Public Laws 84-600, 87-088, 89-234, 89-753, 91-244 and 91-439

Objectives
To accurately start programs of waste treatment works construction by providing grants for part of the eligible construction costs.

Type of Assistance
Project grants

Uses
Grants are limited to the construction of waste treatment works including interception and outfall sewers.

Applicant Eligibility
A municipality certificated by the state is required before a grant can be made.

Assistance Considerations
By detailed formula, however, matching requirements are necessary in most cases.

SCHOOLS

In the area of school assistance the fedederal government has several principal programs. These, of course, supplement the school foundation programs of the State of Montana.

SCHOOLS continued

1. Title
School Assistance in Federally Effected Areas in Construction (Impact Aid)

Federal Agency
Office of Education, Department of Health, Education and Welfare

Authorization
Federal Impact Area - Public Law 81-815

Objectives
To provide assistance for the construction of urgently needed minimum school facilities in districts which have had substantial increase in student enrollment as a result of federal activity.

Type of Assistance
Project grants

Uses
To construct and equip minimum school facilities for educational agencies that provide free elementary and secondary education.

Applicant Eligibility
Local educational agencies which provide free public education

Assistance Considerations
Formula is based on the estimated increase in the number of federally connected children. The payment a district can receive is determined by multiplying the number of children counted for payment by the subsidy rate of payment per child. There is no matching requirement.

2. Title
School Assistance in Federally Effected Areas in Maintenance and Operation (Impact Aid)

Federal Agency
Office of Education, Department of Health, Education and Welfare

SCHOOLS continued

Authorization
Federally Impacted Areas Titles 1 - 3 of
Public Law 81-874

Objectives
To provide financial assistance to local educational agencies where the tax base of the district is reduced through the federal acquisition of real property or the sudden increase in school attendance as a result of federal activity either for the education of children residing on federal property or children whose parents are employed by the federal government.

Type of Assistance
Formula grants

Uses
The payment of maintenance and operation expenditures

Applicant Eligibility
Local education agencies which provide free public elementary or secondary education

Assistance Considerations
By formula and there are no local matching requirements

3. Title
School Library Library Resources, Textbooks and Other Materials

Federal Agency
Office of Education, Department of Health, Education and Welfare

Authorization
Elementary and Secondary Education Act of 1965, Title 2, Public Law 89-010, 89-750, 90-247 and 90-230

Objectives
To improve the quality of instruction by providing funds to acquire school library resources.

Type of Assistance
Formula grants

SCHOOLS continued

Uses
Material acquired in this program is limited to those approved by the appropriate state educational authority.

Applicant Eligibility
State Department of Education

Assistance Consderations
Funds are allocated to each of the 50 states on the basis of total number of children enrolled in public and private schools in relation to the total number of children enrolled in schools in all of the states.

4. Title
Strengthen Instruction Through Equipment and Minor Remodeling

Federal Agency
Office of Education, Department of Health, Education and Welfare

Authorization
National Defense Education Act of 1958, Public Law 85-864

Objectives
The acquisition of library and other special equipment and materials

Type of Assistance
Formula grants

Uses
Funds are limited to public elementary and secondary schools for materials other than textbooks and supplies consumed through use

Applicant Eligibility
State educational agencies

Assistance Considerations
Federal funds can provide, based on formula, up to 50 percent of the total cost.

APPENDIX D - DEVELOPMENT CORPORATION ORGANIZATION

1. General Advantages of a Private Development Corporation

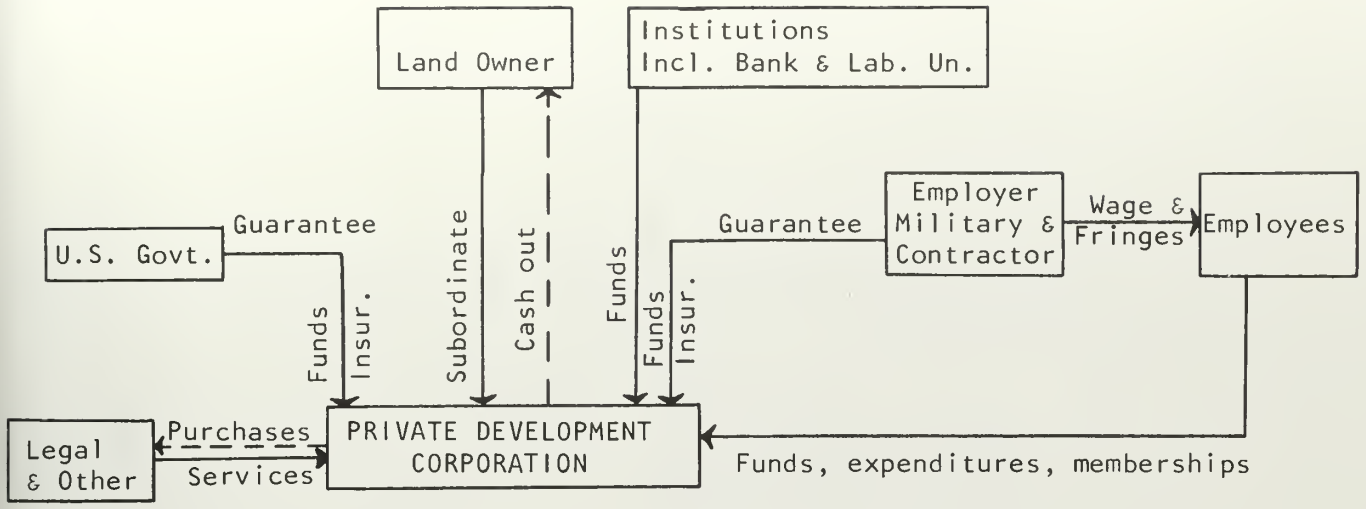
   a. Finance, buy, sell in quantity
   b. Pass on benefits to users and others
      1. Monetary savings
      2. Amenities available in Planned Unit Development(PUD) spread to many users
      3. One concerted localized development effort rather than a scatteration of many individual efforts.

2. Character of the Development

   a. Considerations
      1. Construction work is transient, short-term
      2. Military presence
   b. Design Implications
      1. A major portion of the facilities and housing should be semimobile.
      2. Exceptions are Bachelor Officer Quarters and permanent houses and apartments which can serve the local community.
   c. Solution
      1. Modular housing (a major improvement over mobile homes.)
      2. Permanent residences and institutional
      3. Innovative housing technologies

3. Formation, Organization, and Ownership of Housing Development Corporation

   a. Inceptions
      1. Contractors and DOD take initiative, or private developer
      2. Public entry to influence formation
         a) Influence costs to lease, buy, or sell in a given location
         b) Other action
   b. Landowner sells, subordinates, leases (or mix thereof)
      i.e., parcels in northwest and northeast Conrad
      - contiguous ownership several hundred acres
      - possible leasehold condemnation by State
   c. Assurances - DOD and contractors guarantee certain occupancy



d. Sources of development funds and corporate membership (a mix of the following)
   1. Contractors and military from normal budgets
   2. Investment syndication
      Employees and personnel: fringe benefits from wages fund
      : innovative areas of cooperative membership and nonprofit.
      : HUD, FHA, other assistance, etc.
   3. Borrow funds: financial and other institutions
   4. Government guarantee, insures
   5. Federal assistances

e. Organization set up costs
   1. Legal services
   2. Architectural/engineering/planning services.

4. Development of PUD Community

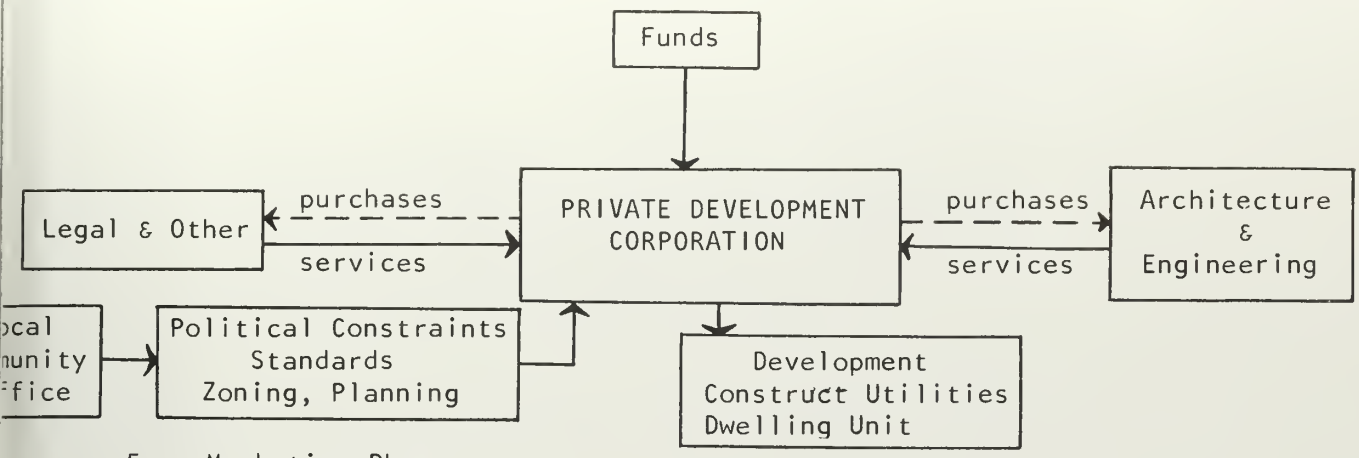
a. Costs to plan and get approvals
   1. Architectural/engineering/surveying services
   2. Legal fees
   3. Seek solution to local political constraints

b. Solution to political constraints imposed by local community
   1. Building codes and standards
   2. Zoning
   3. Other local considerations

c. Land preparation
   1. Contracts

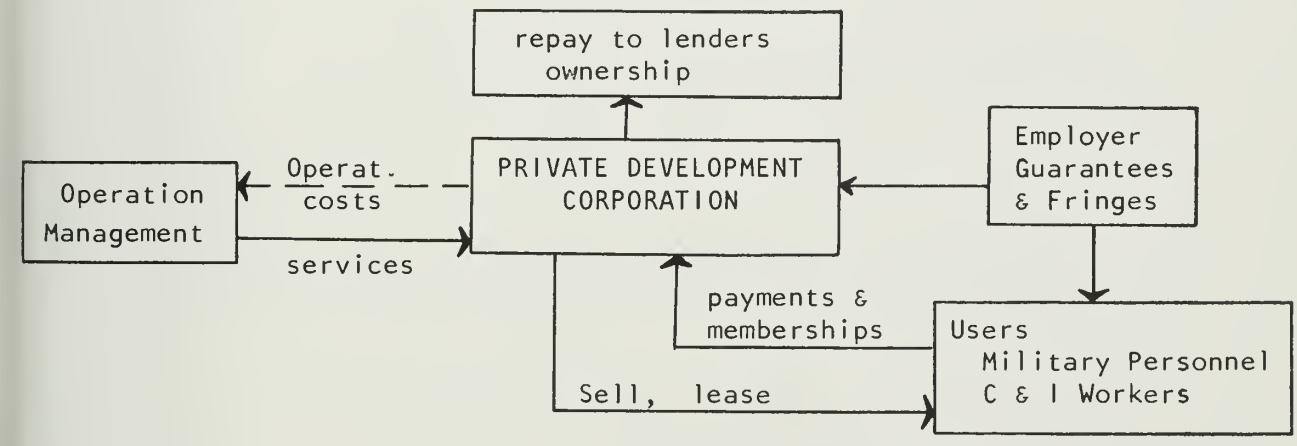
d. Develop housing in stages (liaison with interlocal organizations)
   1. Contracts

APPENDIX D continued



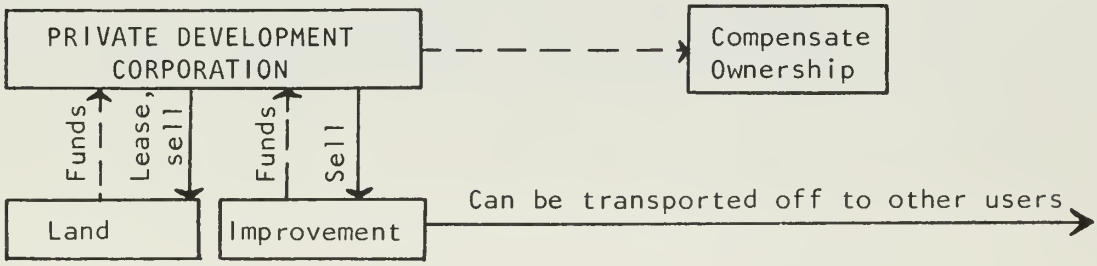
5. Marketing Phase

a. Sale of lease facilities to contractors
b. Lease or rent facilities to other users and advertise if necessary
c. Other methods by payments by users
   1) Lease to cooperative



6. Dissolution of Corporation

a. Sale of buildings and facilities
b. Sale of buildings and facilities to other locations
   1) Transport by road or rail
c. Sale of property to other users
d. Compensation to corporate membership



APPENDIX E - BASIS FOR RECOMMENDATIONS - METHODOLOGY

The recommendations were reached by an extensive process which included:

1. Assessing the impacts
2. Inventorying existing conditions in the impact area
3. Understanding the objectives of those affected by and involved in the program
4. Formulating preliminary concepts, and
5. Developing and simulating alternatives

This process can be diagrammed as shown below:

IMPACTS
+
EXISTING CONDITIONS → INITIAL CONCEPTS → ALTERNATIVES → RECOMMENDATIONS
+
OBJECTIVES

On the following pages summary discussions describe this study process. Detailed descriptions and data compilations are contained in Report 1 - Resources Inventory, Report 2 - Initial Impact Alternatives.

1. Objectives

A major effort in the study process was the determination of objectives. These involved several strata of public and private interests.

It was apparent that contractors would wish to develop in a way which would not cause excessive private costs. Once a contractor makes a decision (and many already have been made) he is almost irrevocably locked into that decision if it involves contracts to purchase or lease land. Even if decisions have been made, the contractor may still be induced to settle in a given manner.

Further, while local governments want as little damage as possible from the impact, they may not have a choice unless they can use funds and innovative schemes to get contractors and workers to move into a distribution which is mutually beneficial. If the costs are too high to get all groups together to make agreements, the State and local

people may have to bear much of the cost of uncoordinated development.

There seemed to be adequate areas where joint goals could be satisfied and from which the recommendations for policy and for planning are derived.

The following joint goals were recognized:

a. National Defense - PAR, MSR sites as given
b. Environmental Quality
c. Minimize private development costs
d. Minimize travel costs
e. Minimize public costs
f. Minimize military development costs
g. Employ local people to greatest extent
h. Minimize wage, price increases

These objectives, when indentifed, were rated to determine the value placed on them by different groups involved in the ABM project to find areas of strong agreement and areas of greatest problems.

It is apparent that the objectives of the Department of Defense, the contractors, new ABM workers, Conrad and Shelby residents, and other rural and regional residents are not now and will not be the same except by accident.

It is also apparent that beyond the stated goals of various groups and individuals - and perhaps more important - are the implications of these objectives. For example, the objective of minimizing public costs is both achievable and attractive. But, in practice, it is untenable because it places too high a burden on private costs for a program to carry out national defense policy.

Many of the private costs of developing facilities for the Safeguard System personnel could be funded by the Department of Defense in addition to the public costs now being funded through the assistance program. While additional funding from DOD could alleviate the drain on state, local, and private funds, it could also reduce the involvement of the State Planning Department in coordinating development policy with other agencies. Whereas the objectives of the Department of Defense to develop PAR and MSR as strategic components of the ABM system are formulated in the context

of national defense, the implications are felt on a State-wide, regional, and local level. Regionally the effects will be felt on urbanization patterns, transportation facilities and highways. On a local level, the defense objectives have implications as potential for a "boom or bust" economy in the community or towns which receive the greatest impacts from the ABM program.

Thus, there is a need to closely coordinate federal aid with local goals and objectives. And there is a corresponding necessity to stimulate private, permanent development to increase the amenity in the entire impact area for the duration of the ABM program.

2. Preliminary Concepts

Several preliminary concepts were formulated to hypothesize possible ways of directing incoming growth. Each concept provided for different distributions of population. These distributions, in turn, implied varying costs and benefits both to the population influx as well as to individual communities and the region as a whole. Several of these concepts are discussed below in terms of the potential costs and benefits.

a. New Towns

New enclaves with their own community facilities and utilities developed outside existing communities would cause the least disruption to those communities. They would alleviate the risks to established towns of a short-term ABM program. And, significant economies might be achieved by using modular or packaged development which could be disassembled and sold after ABM.

However, although the economic harm to existing communities would be small, benefits would be few. New towns with their own public services, education, medical services, and trade facilities would contribute little to existing communities. The resulting isolation of these enclaves would not be desirable for the communities nor for the new population. Further, if ABM is terminated, another town would be left standing idle. Many of the costs, such as sewer and water, would be substantial in the developing of a new community and existing transportation and local road networks would have to be extended.

APPENDIX E continued

b. Concentration in Existing Communities

Concentration of ABM population into nearby communities (Conrad, Shelby, Valier, Brady) would intensify and localize the impact. It would be necessary for these communities to provide public and cultural - social amenities which could cause economic hardship if assistance funds were not available. But the concentrated population increase would make feasible major improvements to public facilities, services and equipment which would be of long-term use to the communities and to the region beyond the ABM program. Key investments would be made in health services, public safety services, administrative services, cultural activities, education and support services. If the ABM program terminates, the "bust" phase of the "boom and bust" cycle would be significant only in the few communities where the impact was concentrated.

Such concentration, however, can cause social problems because of the income and life-style differences between the relatively affluent impact population and local residents. Construction workers with high wages are recreation oriented. Many of the military are well educated, well traveled. Many are black or chicano.

c. Dispersion in Existing Communities

If the new population were distributed among existing communities in the region, many towns would feel some impact but few would be strained enough to require major assistance. While the impact would not be felt as intensely at a few of the larger communities, many smaller ones which are unequipped to handle the additional need for sewers, water or other public services would have to make relatively significant investments.

School systems in dispersed communities could conceivably absorb additional students with some inconvenience but few systems would be able to make major improvements with their own resources. There are many vacant lots and deteriorating dwellings in some communities which could be improved to increase available housing stock.

The lack of a critical population mass to require massive upgrading of facilities or to justify DOD funds would prevent many communities from making long-term invtments.

APPENDIX E continued

Nonetheless, investments would have to be made at many locations. These improvements would have negligible benefits for individual towns but would bring significant amenities to the total area.

3. Simulation and Policy Strategies

The simulation model was a means of estimating the public and private investment strategies necessary to provide the infrastructure and to produce specific future regional development patterns. The simulation included a broad range of regional development patterns from very high concentration to dispersion. High concentration represented a population distributed very close to the PAR and MSR work sites. Dispersion represented the new population scattered around the region. It is not intended that any pattern is viable, but rather that certain patterns are rejected on the basis of behavioral criteria involving workers' households, contractors, the Department of Defense, developers, and the local communities. Patterns are not actually confirmed but the process of rejection raises the degree of confidence in certain patterns. Some patterns seem best in terms of low public or private costs. Yet those same patterns may be rejected as unviable concepts on a behavioral basis. The simulation allows the planners to explore many development patterns for an indication of the implcations of such a decision.

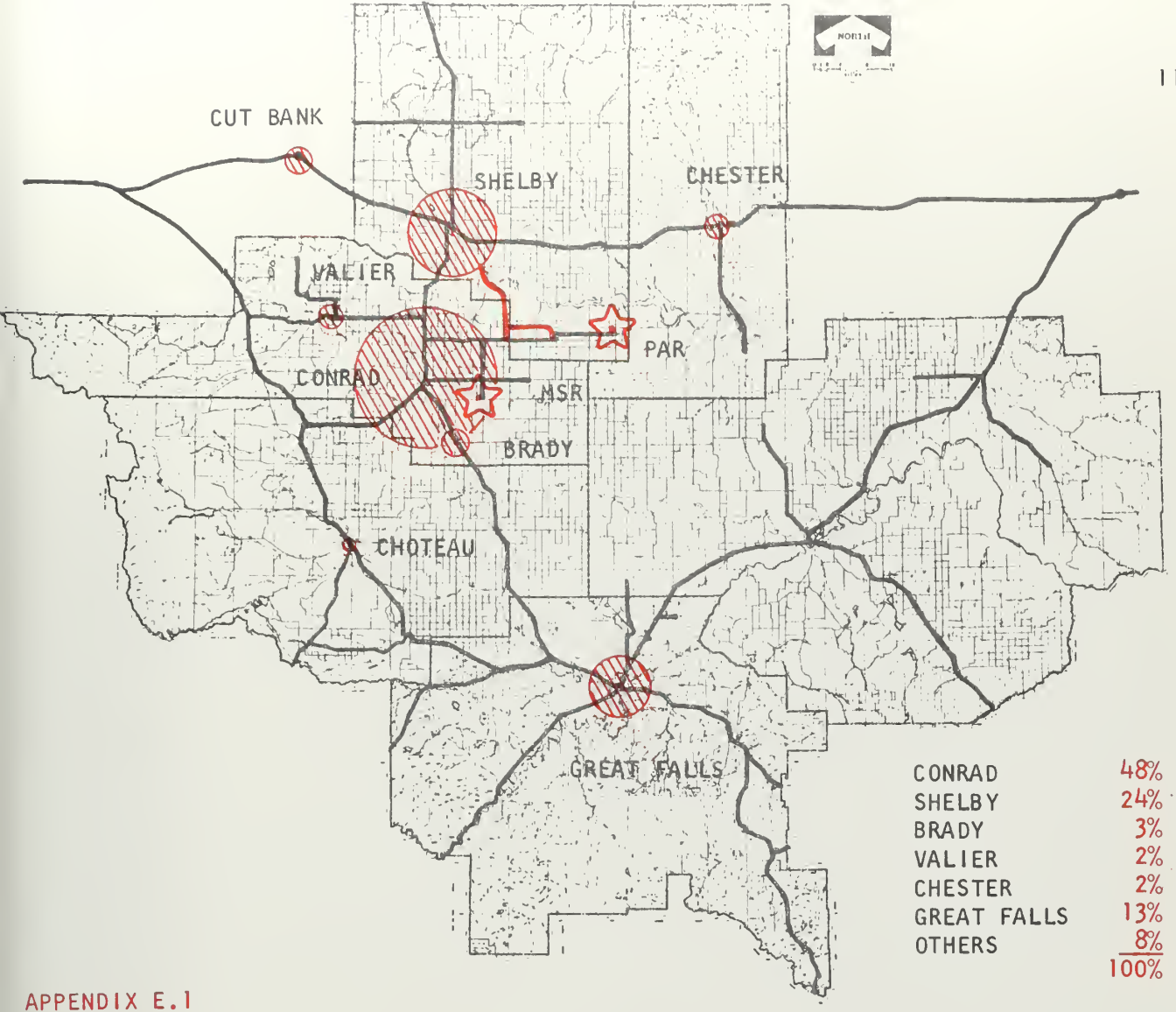
The range of regional development simulations was devised by incorporating the variation in travel time a worker might desire as the basis for the level of concentration or dispersion. The simulation model concentrated or dispersed population on the basis of the variation in travel time by using a queueing specification of the Poisson type. "If," given a certain population distribution, "then" a certain strategy level for external and internal investment and assistance would subsequently be required in order to provide public and private facilities and services at the presently existing local quality or standard of service. Existing standards were correlated with population level and with rural/urban composition. The choice of existing quality or standard may not be as high as those in the eventual policy, but the implications of a wide range of simulated development patterns may be seen, holding standards and quality constant. In the ultimate policy recommendations, standards and quality are higher than existing levels and, subsequently, development strategies usually involve larger levels of investment and assistance than those simulated.

APPENDIX E continued

Policy strategies recommended are more tailored to specific locations; however, the simulation model retains its value in the experimentation of a wide range of policy directions from which one policy direction was chosen. Recommendations differ because of specific capital expenditures at a location which require in all eventualities an entire sewage plant, an entire hospital addition, an entire water treatment plant, and such other improvements for which we require the whole and not just fractional parts. In economics terminology, certain cost functions do not reflect the constant costs that the simulation model does. This does not, however, invalidate the simulation model because such bulky capital improvements would be made in all eventualities. Therefore, one development pattern can be related with another.

Economic and social behaviorial characteristics were implicit in rejecting certain development patterns. Such development patterns implied public or private costs or activity which were associated with improbable behavior. The key element here was round trip commute time from PAR and MSR. While private development decisions can be made which are not in keeping with the behaviorial relationship, there will be a great additional cost.

If decision strategies run counter to expected behavior patterns, decision makers run the risk of creating white elephants at the wrong locations and inadequate plant and services at another location. This represents social waste and loss which is exceedingly critical if there are insufficient external funds and as a result, the existing communities and internal sources must generate the gap in funds through taxation.



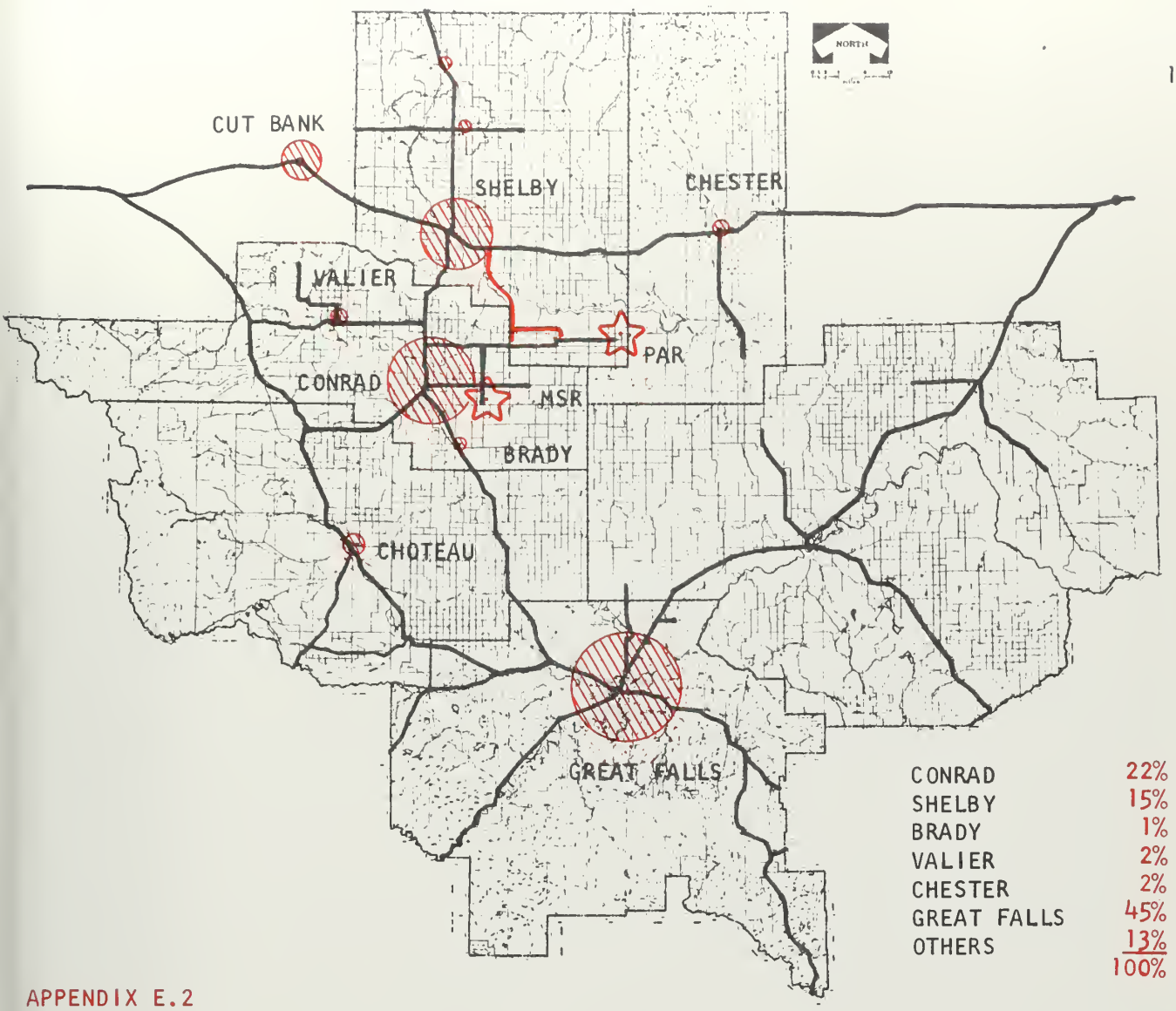
APPENDIX E.1

SIMULATION OF RELATIVE IMPACT ON PUBLIC AND PRIVATE COSTS TO PROVIDE PLANT AND SERVICES REFLECTING PAVING OF "F BRIDGE ROAD" (FAS 417) - HIGH NATURAL CONCENTRATION

TOTALS DO NOT INCLUDE $1,000 THOUSAND TO PAVE FAS 417.

SIX COUNTY AREA, MONTANA 1972-1976
($1,000's in 1972)

LOCATION	PRIMARY SCHOOL	HIGH SCHOOL	PUBLIC SERVICES	HEALTH SERVICES	SEWER SYSTEM	WATER SYSTEM	TOTAL PUBLIC COST	TRAVEL TIME COST	HOUSING DEVELOPMENT COST	COMMERCIAL DEVELOPMENT COST	TOTAL PUBLIC AND PRIVATE COST
CONRAD	1008	648	250	311	517	352	3086	1427	14,305	1481	20,305
SHELBY	131	0	128	253	256	174	942	916	7,088	761	9,712
BRADY	0	11	14	0	29	20	74	94	827	90	1,088
VALIER	17	1	12	0	25	17	72	105	695	75	950
CHESTER	0	6	8	17	17	11	59	80	486	50	681
GREAT FALLS	182	53	68	0	0	0	303	843	0	408	1,516
ALL OTHER	4	58	47	15	38	27	189	0	0	0	0
TOTALS	1342	777	527	596	882	601	4725	3840	24,417	3112	36,100



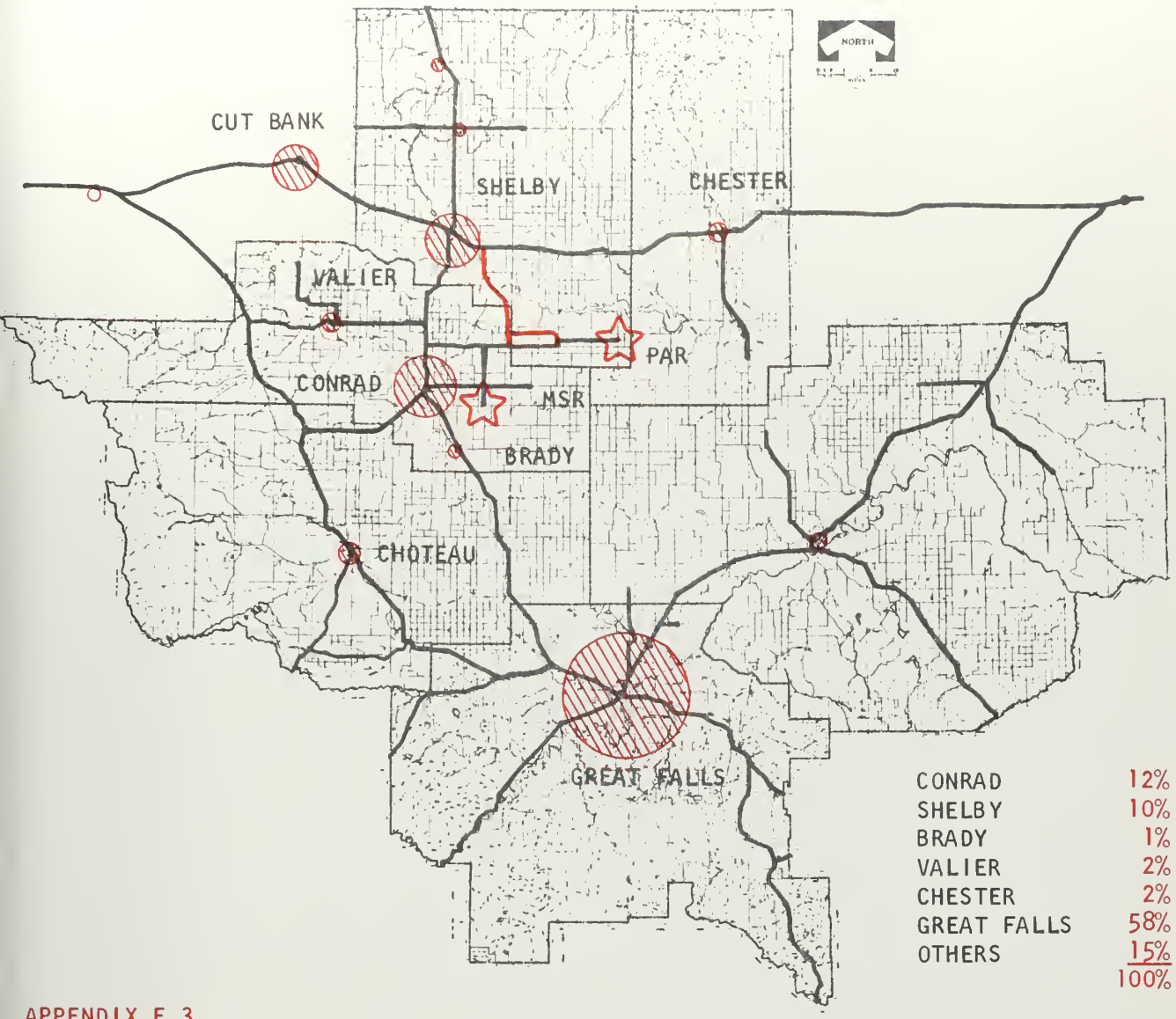
APPENDIX E.2

SIMULATION OF RELATIVE IMPACT ON PUBLIC AND PRIVATE COSTS TO PROVIDE PLANT AND SERVICES REFLECTING PAVING OF "F BRIDGE ROAD" (FAS 417) - MEDIUM NATURAL CONCENTRATION

TOTALS DO NOT INCLUDE $1,000 THOUSAND TO PAVE FAS 417

SIX COUNTY AREA, MONTANA 1972-1976
($1,000's in 1972)

LOCATION	PRIMARY SCHOOL	HIGH SCHOOL	PUBLIC SERVICES	HEALTH SERVICES	SEWER SYSTEM	WATER SYSTEM	TOTAL PUBLIC COST	TRAVEL TIME COST	HOUSING DEVELOPMENT COST	COMMERCIAL DEVELOPMENT COST	TOTAL PUBLIC AND PRIVATE COST
CONRAD	454	283	112	106	226	154	1,335	644	6,276	668	8,931
SHELBY	63	0	79	169	153	104	568	570	4,245	473	5,862
BRADY	0	5	7	0	13	9	34	47	383	45	512
VALIER	15	0	10	0	21	14	60	92	599	65	821
CHESTER	0	8	9	21	21	14	73	97	590	61	826
GREAT FALLS	699	181	238	0	25	17	1,160	2,770	709	1,408	6,051
ALL OTHER	8	95	72	29	81	56	341	-	-	-	-
TOTALS	1,239	572	527	325	540	368	3,571	4,910	14,958	3,112	26,557



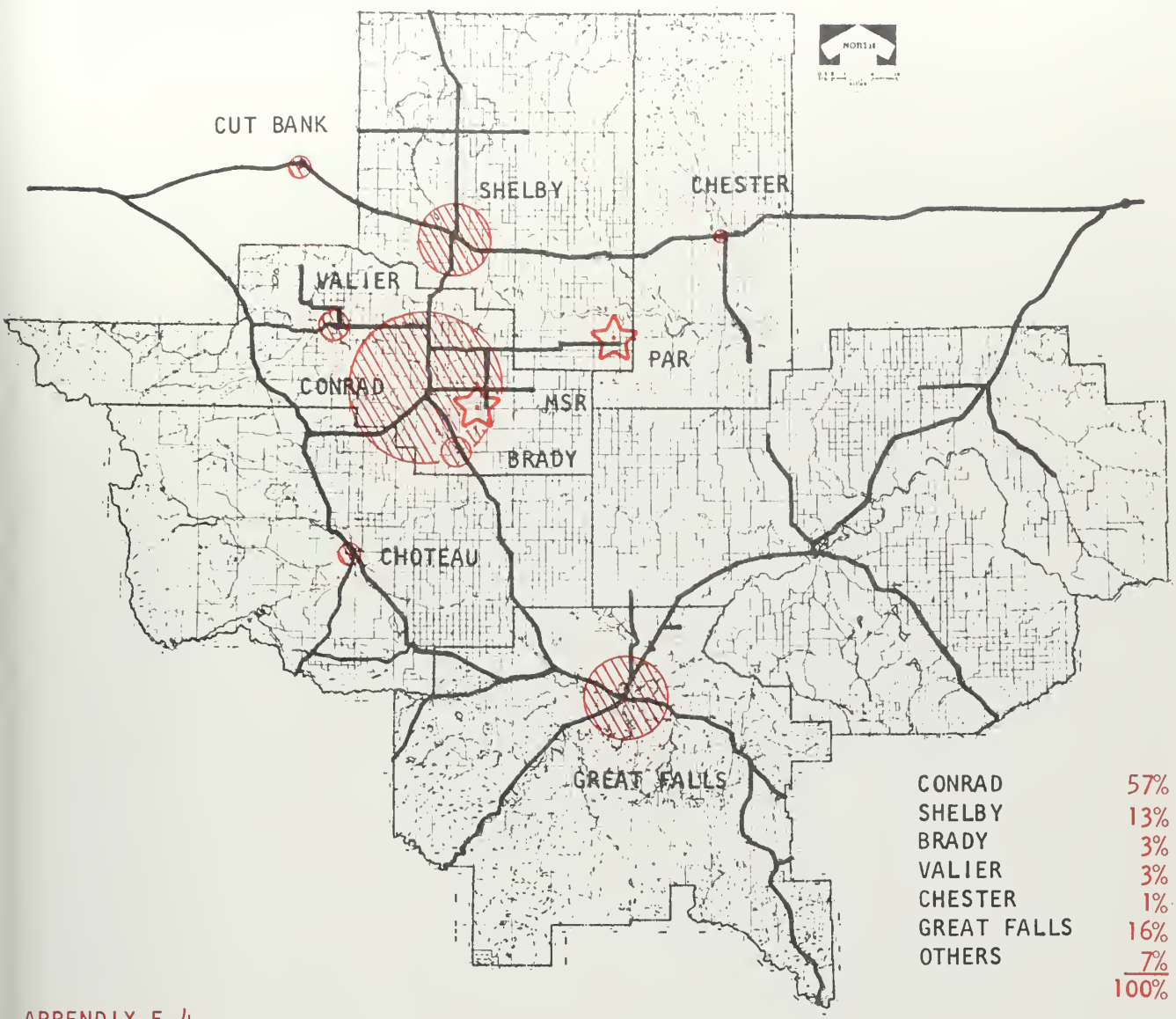
APPENDIX E.3

SIMULATION OF RELATIVE IMPACT ON PUBLIC AND PRIVATE COSTS TO PROVIDE PLANT & SERVICES REFLECTING PAVING OF "F BRIDGE ROAD" (FAS 417) - LOW NATURAL CONCENTRATION

TOTALS DO NOT INCLUDE $1,000 THOUSAND TO PAVE FAS 417

SIX COUNTY AREA, MONTANA 1972-1976
($1,000's in 1972)

LOCATION	PRIMARY SCHOOL	HIGH SCHOOL	PUBLIC SERVICES	HEALTH SERVICES	SEWER SYSTEM	WATER SYSTEM	TOTAL PUBLIC COST	TRAVEL TIME COST	HOUSING DEVELOPMENT COST	COMMERCIAL DEVELOPMENT COST	TOTAL PUBLIC AND PRIVATE COST
CONRAD	262	156	65	64	126	85	758	372	3,487	386	5,009
SHELBY	26	0	53	121	97	66	363	380	2,685	315	3,746
BRADY	0	3	4	0	7	5	19	28	204	27	280
VALIER	11	0	8	0	16	11	46	71	454	50	624
CHESTER	0	7	8	21	19	13	68	88	538	56	753
GREAT FALLS	966	231	304	0	165	112	1,778	3,540	4,580	1,800	11,703
ALL OTHER	11	124	85	31	85	58	394	-	-	-	-
TOTALS	1,276	521	527	237	515	350	3,426	5,386	14,248	3,112	26,178



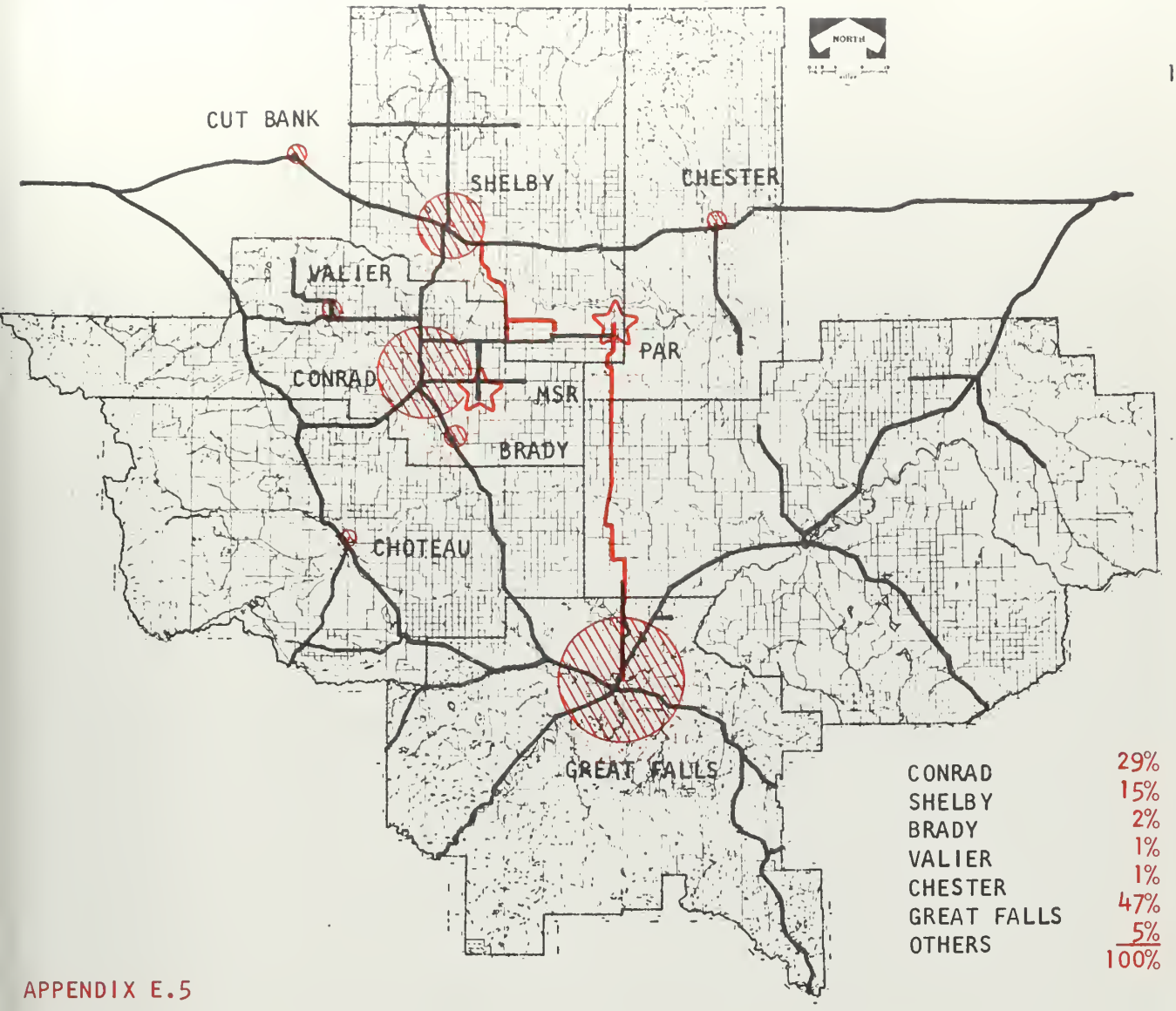
APPENDIX E.4

SIMULATION OF RELATIVE IMPACT ON PUBLIC AND PRIVATE COSTS TO PROVIDE PLANT AND SERVICES UNDER ROAD CONDITIONS IN 1971 HIGH NATURAL CONCENTRATION

NO ROAD EXPENDITURE REQUIRED

SIX COUNTY AREA, MONTANA 1972-1976
($1,000's in 1972)

LOCATION	PRIMARY SCHOOL	HIGH SCHOOL	PUBLIC SERVICES	HEALTH SERVICES	SEWER SYSTEM	WATER SYSTEM	TOTAL PUBLIC COST	TRAVEL TIME COST	HOUSING DEVELOPMENT COST	COMMERCIAL DEVELOPMENT COST	TOTAL PUBLIC AND PRIVATE COST
CONRAD	1,205	778	299	413	620	422	3,737	1,704	17,153	1,769	24,376
SHELBY	53	0	72	142	137	93	497	603	3,806	429	5,339
BRADY	0	13	18	0	36	24	91	112	1,000	107	1,313
VALIER	21	3	14	0	30	20	88	126	839	89	1,146
CHESTER	0	5	5	12	12	8	42	64	359	38	508
GREAT FALLS	217	63	82	0	0	0	362	959	0	487	1,811
ALL OTHER	2	38	37	17	24	18	136	-	-	-	-
TOTALS	1,498	900	527	584	859	585	4,953	3,901	23,773	3,112	35,745



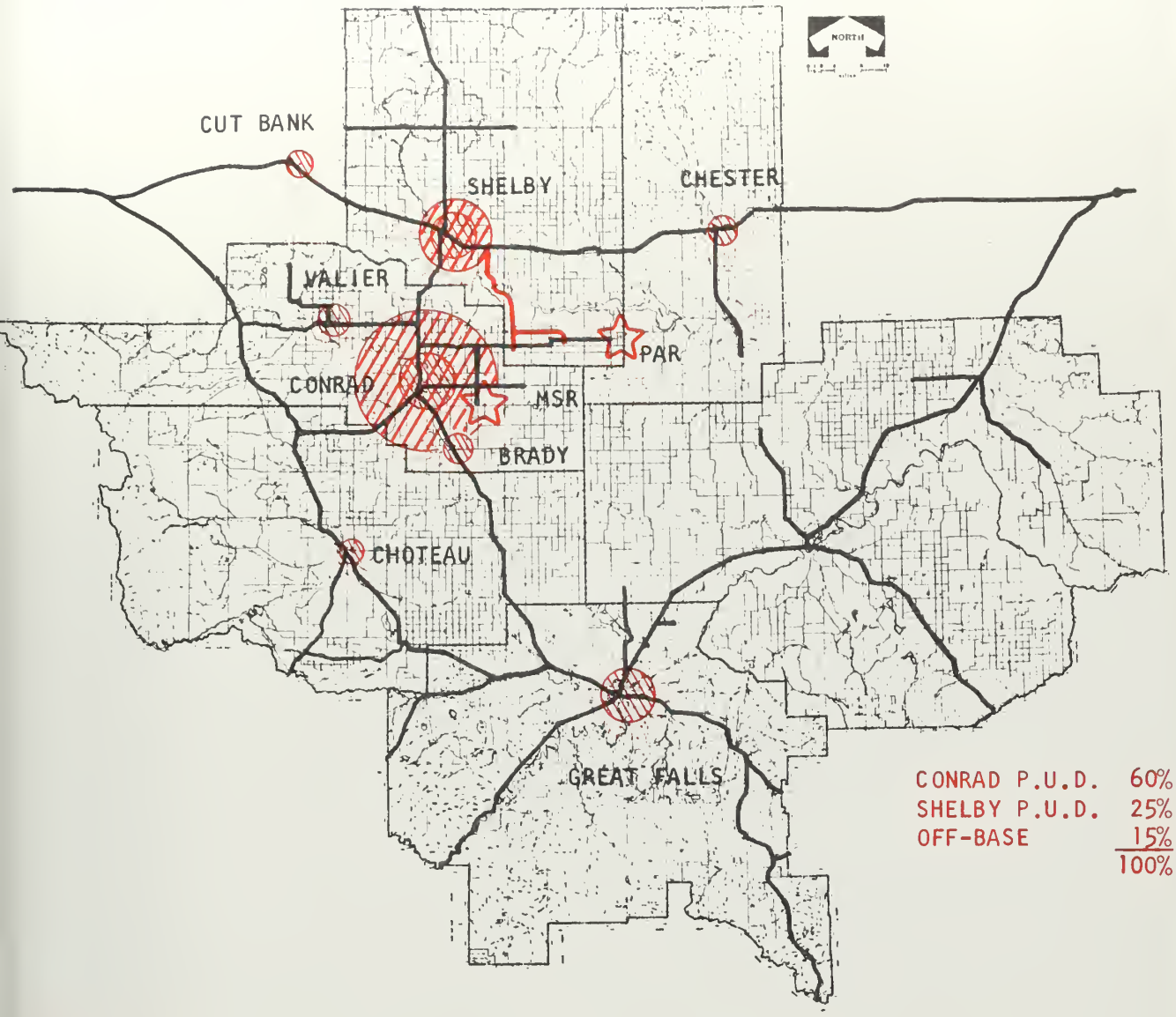
APPENDIX E.5

SIMULATION OF RELATIVE IMPACT ON PUBLIC AND PRIVATE COSTS TO PROVIDE PLANT AND SERVICES REFLECTING PAVING OF "F BRIDGE ROAD" AND "BOOTLEGGER TRAIL" (FAS 425) HIGH NATURAL CONCENTRATION

TOTALS DO NOT INCLUDE $4,400 THOUSAND TO PAVE FAS 225 AND FAS 417

SIX COUNTY AREA, MONTANA 1972-1976
($1,000's in 1972)

LOCATION	PRIMARY SCHOOL	HIGH SCHOOL	PUBLIC SERVICES	HEALTH SERVICES	SEWER SYSTEM	WATER SYSTEM	TOTAL PUBLIC COST	TRAVEL TIME COST	HOUSING DEVELOPMENT COST	COMMERCIAL DEVELOPMENT COST	TOTAL PUBLIC AND PRIVATE COST
CONRAD	608	383	150	135	307	209	1,792	860	8,492	893	12,042
SHELBY	60	0	76	153	148	100	537	552	4,100	459	5,653
BRADY	0	6	8	0	17	11	42	56	473	54	629
VALIER	10	0	7	0	14	9	40	63	399	45	551
CHESTER	0	4	4	10	10	7	35	48	287	30	404
GREAT FALLS	746	189	250	0	50	34	1,269	2,463	1,403	1,478	6,618
ALL OTHER	3	35	32	8	15	12	105	-	-	-	-
TOTALS	1,427	617	527	306	561	382	3,820	4,299	15,523	3,112	26,761



APPENDIX E.6

SIMULATION DELIBERATE CONCENTRATION WITH "P.U.D.S" IN CONRAD & SHELBY SHOWING PUBLIC & PRIVATE COSTS TO PROVIDE PLANT & SERVICES

TOTALS DO NOT INCLUDE $1,000 THOUSAND TO PAVE FAS 417

SIX COUNTY AREA, MONTANA 1972-1976
($1,000's in 1972)

LOCATION	PRIMARY SCHOOL	HIGH SCHOOL	PUBLIC SERVICES	HEALTH SERVICES	SEWER SYSTEM	WATER SYSTEM	TOTAL PUBLIC COST	TRAVEL TIME COST	HOUSING DEVELOPMENT COST	COMMERCIAL DEVELOPMENT COST	TOTAL PUBLIC AND PRIVATE COST
CONRAD	99	49	264	286	547	372	1618	142	15,140	1,565	18,471
SHELBY	0	0	165	307	333	227	1032	91	9,233	978	11,338
BRADY	0	1	1	0	0	1	3	9	24	8	46
VALIER	1	0	0	0	0	0	2	10	25	7	48
CHESTER	0	0	0	1	1	0	2	8	34	5	52
GREAT FALLS	18	5	5	0	0	0	20	79	0	40	151
ALL OTHER	—	—	—	—	—	—	—	—	—	—	—
TOTALS	120	61	445	598	885	603	2715	382	24,504	2,631	30,234

APPENDIX F - LEGISLATIVE REFERENCES

1. BUILDING CODE (Title 69, Chapter 21)

2. ADOPTED CODES

Enforced for any public place, city and town.
Administered by State Building Code Council.

a.	Uniform Building Code	- 1971
b.	National Electric	- 1971
c.	Uniform Mechanical	- 1971
d.	Mobile Homes	ASI 119.1
e.	Recreational Vehicles	ASI 119.2

3. LEGISLATION

a. Planning - Title 11, Chapter 38
b. Health - Title 69, Chapter 50 (Subdivisions)
c. Water Control Commission - Title 89, Chapter 35 (Flood Plane Designation and Management)
d. Environmental Policy Act - Title 69, Chapter 65
e. Plat Law - Title 11, Chapter 6 (Subdivisions)
f. Housing Authority - Title 35, Chapter 1
g. Subdivision of Land for Sale Outside State - Title 67, Chapter 21
h. Interlocal Cooperation Act - Title 16, Chapter 49
i. Interlocal Cooperation Committee - Title 2, Chapter 44
j. Open Space Land - Title 62, Chapter 601
k. Rural Improvement Districts (Sewer, Water, Solid Waste, etc.) Title 16, Chapter 1601

PROJECT TEAM

WILSEY & HAM	
Felix M. Warburg	Planner-In-Charge
Robert Dean-Turner	Project Planner
Barbara E. Witte	Report Writer
MORRISON-MAIERLE, INC.	Consulting Engineers
Willis Wetstein	
John Carpita	
T.A.P. INC.	Economic Consultants
Lloyd Rixe	
Monte Eliason	